RE: 210402
Lot 138 HT

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

Site Information:

Customer: Project Name: 210402
Lot/Block: Model:
Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE716LowRise Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 71 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45767974	A1	4/22/2021	21	I45767994	D5	4/22/2021
2	I45767975	A4	4/22/2021	22	I45767995	D6	4/22/2021
3	I45767976	A5	4/22/2021	23	I45767996	D7	4/22/2021
4	I45767977	A6	4/22/2021	24	I45767997	E1	4/22/2021
5	I45767978	A7	4/22/2021	25	I45767998	E2	4/22/2021
6	I45767979	A8	4/22/2021	26	I45767999	E3	4/22/2021
7	I45767980	B1	4/22/2021	27	I45768000	E4	4/22/2021
8	I45767981	B2	4/22/2021	28	I45768001	E5	4/22/2021
9	I45767982	B3	4/22/2021	29	I45768002	G1	4/22/2021
10	I45767983	B4	4/22/2021	30	I45768003	G2	4/22/2021
11	I45767984	C7	4/22/2021	31	I45768004	G3	4/22/2021
12	I45767985	C8	4/22/2021	32	I45768005	G4	4/22/2021
13	I45767986	C9	4/22/2021	33	I45768006	J1	4/22/2021
14	I45767987	C10	4/22/2021	34	I45768007	J2	4/22/2021
15	I45767988	C11	4/22/2021	35	I45768008	J3	4/22/2021
16	I45767989	C12	4/22/2021	36	I45768009	J4	4/22/2021
17	I45767990	C13	4/22/2021	37	I45768010	J5	4/22/2021
18	I45767991	C14	4/22/2021	38	I45768011	J6	4/22/2021
19	I45767992	D3	4/22/2021	39	I45768012	J7	4/22/2021
20	I45767993	D4	4/22/2021	40	I45768013	J8	4/22/2021

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Kansas is April 30, 2022.

Kansas COA: E-943

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

April 22, 2021

Garcia, Juan

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

RE: 210402 - Lot 138 HT

Site Information:

Project Customer: Project Name: 210402
Lot/Block: Subdivision:
Address:
City, County: State:

No.	Seal#	Truss Name	Date
41	I45768014	J9	4/22/2021
42	I45768015	J10	4/22/2021
43	I45768016	J11	4/22/2021
44	I45768017	J12	4/22/2021
45	I45768018	J13	4/22/2021
46	I45768019	J14	4/22/2021
47	I45768020	J15	4/22/2021
48	I45768021	J16	4/22/2021
49	I45768022	J17	4/22/2021
50	I45768023	LAY1	4/22/2021
51	I45768024	LAY2	4/22/2021
52	I45768025	LAY3	4/22/2021
53	I45768026	LAY4	4/22/2021
54	I45768027	LAY5	4/22/2021
55	I45768028	LAY6	4/22/2021
56	I45768029	P1	4/22/2021
57	I45768030	V1	4/22/2021
58	I45768031	V2	4/22/2021
59	I45768032	V3	4/22/2021
60	I45768033	V4	4/22/2021
61	I45768034	V5	4/22/2021
62	I45768035	V6	4/22/2021
63	I45768036	V7	4/22/2021
64	I45768037	V8	4/22/2021
65	I45768038	V9	4/22/2021
66	I45768039	V10	4/22/2021
67	I45768040	V11	4/22/2021
68	I45768041	V12	4/22/2021
69	I45768042	V13	4/22/2021
70	I45768043	V14	4/22/2021
71	I45768044	V15	4/22/2021

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Lot 138 HT

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Site Information:

Customer: Project Name: 210402
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Address: Subdivision:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2018/TPI2014 Design Program: MiTek 20/20 8.4
Wind Code: ASCE716LowRise Wind Speed: 115 mph
Roof Load: 45.0 psf Floor Load: N/A psf

This package includes 71 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I45767974	A1	4/22/2021	21	I45767994	D5	4/22/2021
2	I45767975	A4	4/22/2021	22	I45767995	D6	4/22/2021
3	I45767976	A5	4/22/2021	23	I45767996	D7	4/22/2021
4	I45767977	A6	4/22/2021	24	I45767997	E1	4/22/2021
5	I45767978	A7	4/22/2021	25	I45767998	E2	4/22/2021
6	I45767979	A8	4/22/2021	26	I45767999	E3	4/22/2021
7	I45767980	B1	4/22/2021	27	I45768000	E4	4/22/2021
8	I45767981	B2	4/22/2021	28	I45768001	E5	4/22/2021
9	I45767982	B3	4/22/2021	29	I45768002	G1	4/22/2021
10	I45767983	B4	4/22/2021	30	I45768003	G2	4/22/2021
11	I45767984	C7	4/22/2021	31	I45768004	G3	4/22/2021
12	I45767985	C8	4/22/2021	32	I45768005	G4	4/22/2021
13	I45767986	C9	4/22/2021	33	I45768006	J1	4/22/2021
14	I45767987	C10	4/22/2021	34	I45768007	J2	4/22/2021
15	I45767988	C11	4/22/2021	35	I45768008	J3	4/22/2021
16	I45767989	C12	4/22/2021	36	I45768009	J4	4/22/2021
17	I45767990	C13	4/22/2021	37	I45768010	J5	4/22/2021
18	I45767991	C14	4/22/2021	38	I45768011	J6	4/22/2021
19	I45767992	D3	4/22/2021	39	I45768012	J7	4/22/2021
20	I45767993	D4	4/22/2021	40	I45768013	J8	4/22/2021

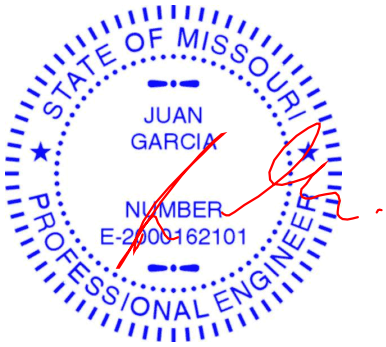
The truss drawing(s) referenced above have been prepared by MiTek USA, Inc under my direct supervision based on the parameters provided by Wheeler - Waverly.

Truss Design Engineer's Name: Garcia, Juan

My license renewal date for the state of Missouri is December 31, 2022.

Missouri COA: 001193

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek. Any project specific information included is for MiTek customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



April 22, 2021

Garcia, Juan

MiTek USA, Inc.
16023 Swingley Ridge Rd
Chesterfield, MO 63017
314-434-1200

RE: 210402 - Lot 138 HT

Site Information:

Project Customer: Project Name: 210402
Lot/Block: Subdivision:
Address:
City, County: State:

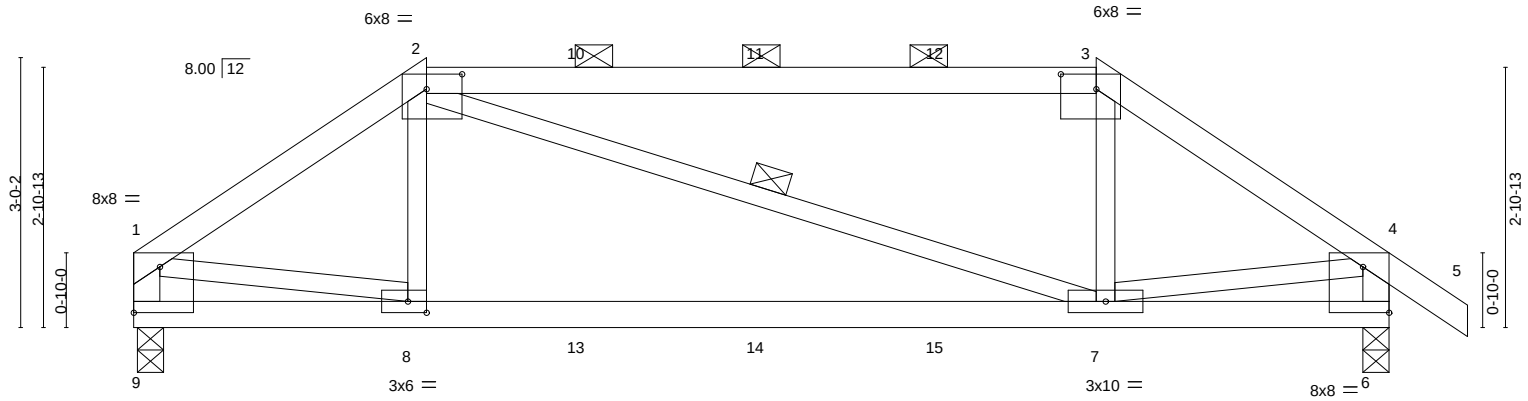
No.	Seal#	Truss Name	Date
41	I45768014	J9	4/22/2021
42	I45768015	J10	4/22/2021
43	I45768016	J11	4/22/2021
44	I45768017	J12	4/22/2021
45	I45768018	J13	4/22/2021
46	I45768019	J14	4/22/2021
47	I45768020	J15	4/22/2021
48	I45768021	J16	4/22/2021
49	I45768022	J17	4/22/2021
50	I45768023	LAY1	4/22/2021
51	I45768024	LAY2	4/22/2021
52	I45768025	LAY3	4/22/2021
53	I45768026	LAY4	4/22/2021
54	I45768027	LAY5	4/22/2021
55	I45768028	LAY6	4/22/2021
56	I45768029	P1	4/22/2021
57	I45768030	V1	4/22/2021
58	I45768031	V2	4/22/2021
59	I45768032	V3	4/22/2021
60	I45768033	V4	4/22/2021
61	I45768034	V5	4/22/2021
62	I45768035	V6	4/22/2021
63	I45768036	V7	4/22/2021
64	I45768037	V8	4/22/2021
65	I45768038	V9	4/22/2021
66	I45768039	V10	4/22/2021
67	I45768040	V11	4/22/2021
68	I45768041	V12	4/22/2021
69	I45768042	V13	4/22/2021
70	I45768043	V14	4/22/2021
71	I45768044	V15	4/22/2021

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	A1	Hip Girder	1	1	I45767974
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:07:58 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-v46UDu3woqjJw6TqK_IrPAQiBR3cHOrECfMHkzzORpF

3-3-3 | 10-8-13 | 14-0-0 | 14-10-8
3-3-3 | 7-5-10 | 3-3-3 | 0-10-8

Scale = 1:25.7



0-0-8 | 3-3-3 | 10-8-13 | 14-0-0
0-0-8 | 3-2-11 | 7-5-10 | 3-3-3

Plate Offsets (X,Y)-- [1:Edge,0-6-2], [2:0-4-12,0-2-0], [3:0-4-12,0-2-0], [6:Edge,0-6-2], [8:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.10	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.22	7-8	>732	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.36	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-8	>999	240	Weight: 51 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
2-3: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
1-9,4-6: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-11 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-11 max.): 2-3.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 2-7

REACTIONS. (size) 9=0-3-8, 6=0-3-8
Max Horz 9=-88(LC 4)
Max Uplift 9=-213(LC 8), 6=-237(LC 9)
Max Grav 9=918(LC 1), 6=995(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1255/281, 2-3=-1013/275, 3-4=-1250/280, 1-9=-923/203, 4-6=-1001/226
BOT CHORD 7-8=-278/1020
WEBS 2-8=0/306, 3-7=0/307, 1-8=-252/1015, 4-7=-279/1042

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=213, 6=237.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 99 lb down and 80 lb up at 5-0-0, and 99 lb down and 80 lb up at 7-0-0, and 99 lb down and 80 lb up at 9-0-0 on top chord, and 207 lb down and 108 lb up at 3-3-3, 31 lb down at 5-0-0, 31 lb down at 7-0-0, and 31 lb down at 9-0-0, and 207 lb down and 108 lb up at 10-8-13 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

April 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-2=-70, 2-3=-70, 3-4=-70, 4-5=-70, 6-9=-20

Concentrated Loads (lb)

Vert: 8=-207(F) 7=-207(F) 10=-42(F) 11=-42(F) 12=-42(F) 13=-23(F) 14=-23(F) 15=-23(F)

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	A4	Half Hip Girder	1	2	I45767975
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:07:59 2021 Page 1
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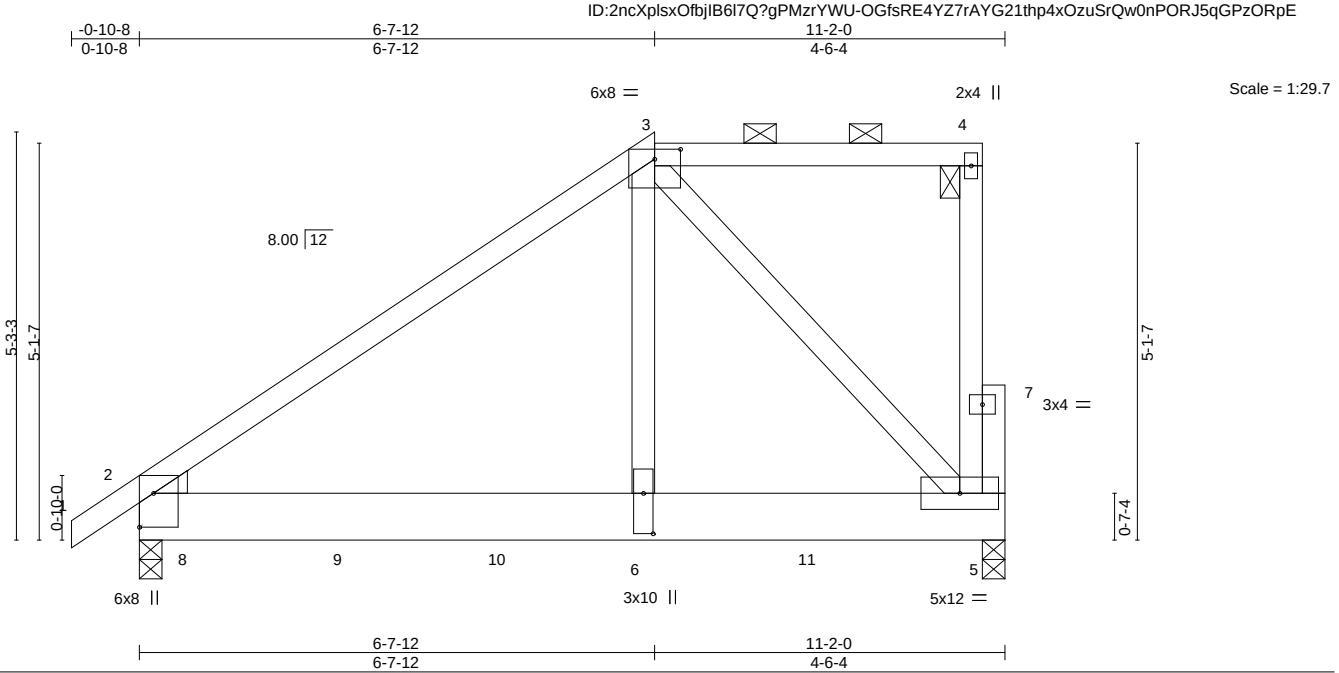

Plate Offsets (X,Y)-- [2:Edge,0-2-3], [3:0-4-0,0-1-9], [6:0-6-4,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.07	2-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.13	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	2-6	>999	240	Weight: 136 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x8 SP DSS
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2
WEDGE
Left: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-7-1 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8 (req. 0-3-13), 2=0-3-8 (req. 0-3-11)
Max Horz 2=154(LC 24)
Max Uplift 5=-103(LC 5)
Max Grav 5=4868(LC 2), 2=4677(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3614/49
BOT CHORD 2-6=-80/2855, 5-6=-80/2709
WEBS 3-6=-8/4738, 3-5=-4005/74

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) WARNING: Required bearing size at joint(s) 5, 2 greater than input bearing size.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 5=103.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1451 lb down at 0-8-0, 1439 lb down and 39 lb up at 2-8-0, 1441 lb down and 37 lb up at 4-8-0, 1441 lb down and 37 lb up at 6-8-0, and 1441 lb down and 37 lb up at 8-8-0, and 1449 lb down and 30 lb up at 10-10-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

April 22,2021

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-4=-70, 2-5=-20
   Concentrated Loads (lb)
   Vert: 5=-1383(B) 6=-1375(B) 8=-1378(B) 9=-1373(B) 10=-1375(B) 11=-1375(B)

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	A5	Roof Special	1	1	I45767976
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:00 2021 Page 1
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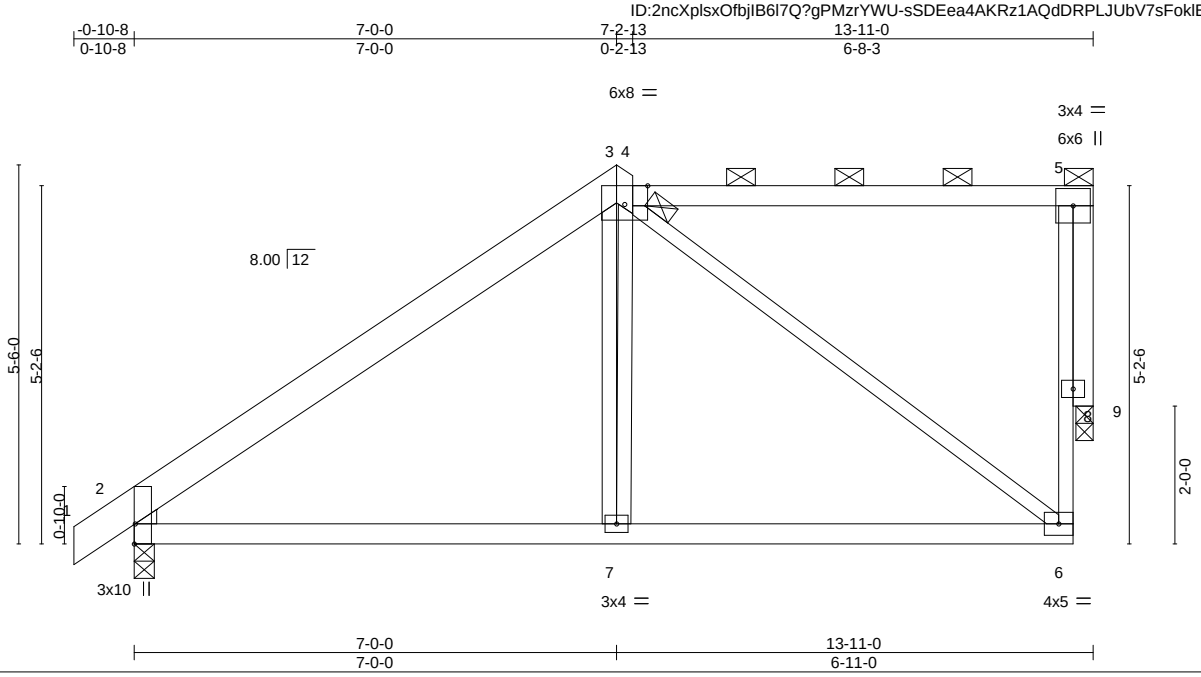

Plate Offsets (X,Y)-- [2:Edge,0-0-3], [3:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.05	2-7	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.39	Vert(CT)	-0.11	2-7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.82	Horz(CT)	0.08	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	2-7	>999	240	Weight: 63 lb	FT = 10%

LUMBER-

TOP CHORD	2x6 SPF No.2 *Except* 4-5: 2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x4 SPF No.2
WEDGE	Left: 2x3 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4, 4-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=0-3-0
Max Horz 2=172(LC 8)
Max Uplift 2=-75(LC 8), 9=-101(LC 9)
Max Grav 2=688(LC 1), 9=587(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=-685/34, 3-4=-417/65, 6-8=-29/378, 5-8=-29/378
BOT CHORD	2-7=-89/472, 6-7=-93/470
WEBS	3-7=-105/337, 4-7=-189/268, 4-6=-519/102, 5-9=-592/102

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 9=101.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	A6	Hip	1	1	I45767977
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:01 2021 Page 1
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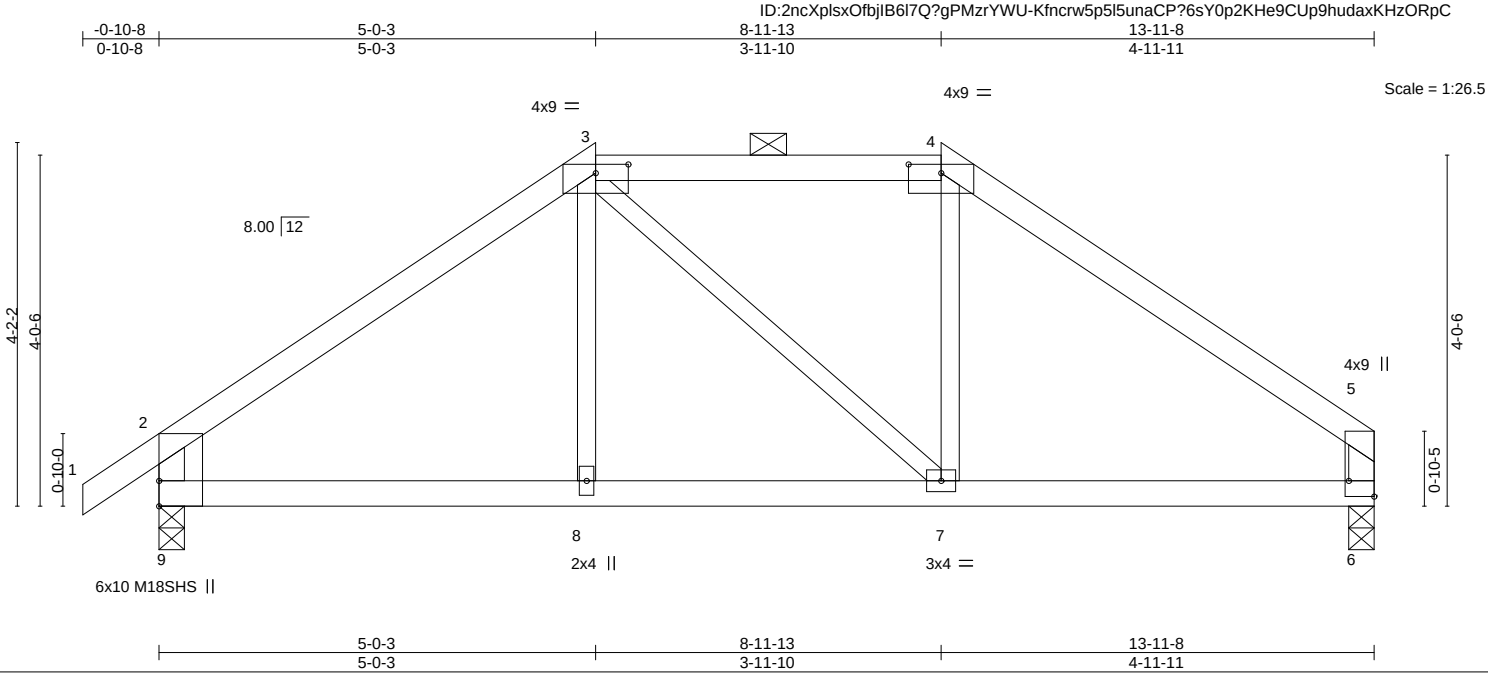

Plate Offsets (X,Y)-- [3:0-4-8,0-1-3], [4:0-4-8,0-1-3], [5:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.45	Vert(LL)	-0.05	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.38	Vert(CT)	-0.09	7-8	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	7-8	>999	240	Weight: 47 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-9,5-6: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=0-3-8, 6=0-3-8
Max Horz 9=119(LC 5)
Max Uplift 9=-80(LC 8), 6=-56(LC 9)
Max Grav 9=689(LC 1), 6=612(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-735/62, 3-4=-511/105, 4-5=-720/60, 2-9=-623/119, 5-6=-531/92
BOT CHORD 8-9=-63/517, 7-8=-64/515, 6-7=-8/513

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT	I45767978
210402	A7	Roof Special Girder	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:02 2021 Page 1

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0-10-8 3-3-3 8-8-3 14-1-3 17-7-3 18-0-13 24-10-0 25-8-8

0-10-8 3-3-3 5-5-0 5-5-0 3-6-0 0-5-10 6-9-3 0-10-8

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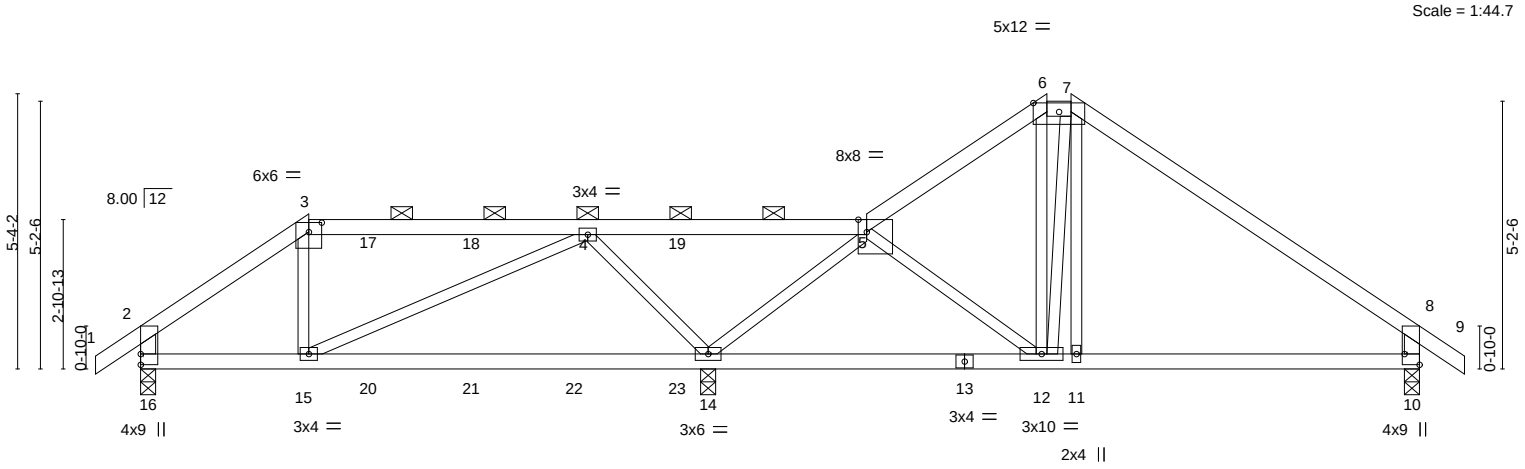

3-3-3 11-0-4 14-1-3 17-7-3 18-0-13 24-10-0

3-3-3 7-9-1 3-0-15 3-6-0 0-5-10 6-9-3

Plate Offsets (X,Y)-- [3:0-3-0,0-2-3], [5:0-1-15,Edge], [6:0-6-0,0-2-1], [10:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.11	14-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.24	14-15	>539	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	14-15	>999	240	Weight: 91 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16,8-10: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5, 6-7.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 16=0-3-8, 14=0-3-8, 10=0-3-8
Max Horz 16=-156(LC 6)
Max Uplift 16=-200(LC 8), 14=-295(LC 8), 10=-176(LC 30)
Max Grav 16=631(LC 1), 14=1564(LC 1), 10=594(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-721/215, 3-4=-524/209, 4-5=-166/616, 5-6=-483/263, 6-7=-369/253, 7-8=-544/209, 2-16=-585/181, 8-10=-542/223
BOT CHORD 15-16=-177/540, 12-14=-274/292, 11-12=-54/345, 10-11=-53/347
WEBS 4-15=-48/474, 4-14=-1034/401, 5-14=-899/167, 5-12=-58/287, 6-12=-288/369, 7-12=-467/210, 7-11=0/257

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 16=200, 14=295, 10=176.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 99 lb down and 80 lb up at 4-5-0, 99 lb down and 80 lb up at 6-5-0, and 99 lb down and 80 lb up at 8-5-0, and 99 lb down and 80 lb up at 10-5-0 on top chord, and 163 lb down and 88 lb up at 3-3-3, 31 lb down at 4-5-0, 31 lb down at 6-5-0, and 31 lb down at 8-5-0, and 31 lb down at 10-5-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

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Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-70, 2-3=-70, 3-5=-70, 5-6=-70, 6-7=-70, 7-8=-70, 8-9=-70, 10-16=-20
   Concentrated Loads (lb)
   Vert: 15=-163(F) 4=-42(F) 17=-42(F) 18=-42(F) 19=-42(F) 20=-23(F) 21=-23(F) 22=-23(F) 23=-23(F)

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	A8	Roof Special	1	1	I45767979
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:04 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-kETlUx7hOgTTe1x_gEPFeRgoSsASh1d7abpbxczORp9

0-10-8	5-0-3	11-0-4	15-10-3	17-10-0	24-10-0	25-8-8
0-10-8	5-0-3	6-0-1	4-9-15	1-11-13	7-0-0	0-10-8

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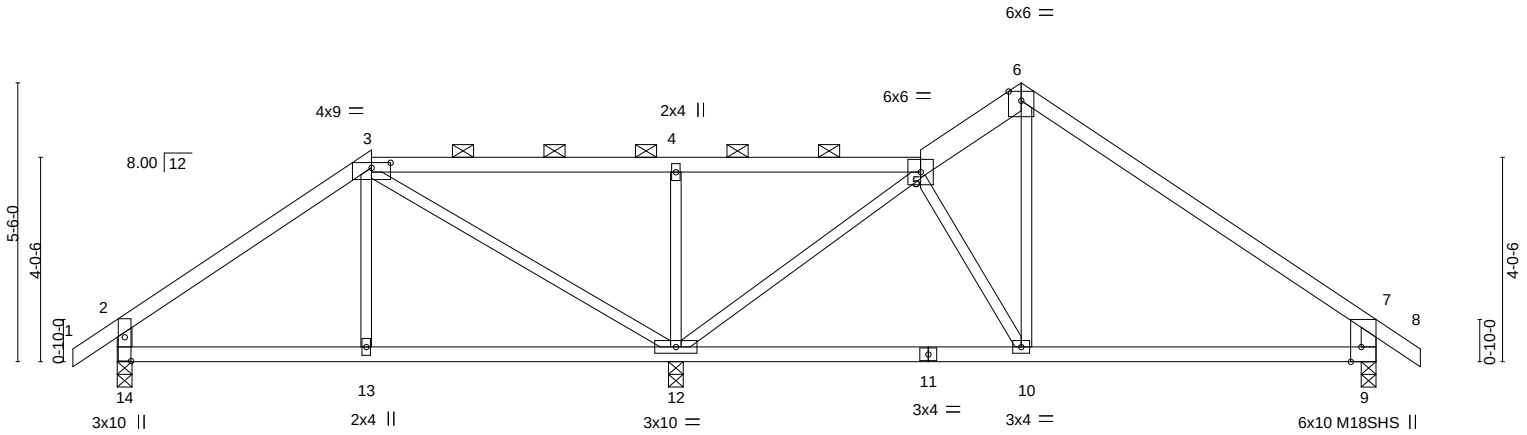

5-0-3	11-0-4	17-10-0	24-10-0
5-0-3	6-0-1	6-9-12	7-0-0

Plate Offsets (X,Y)-- [3:0-4-8,0-1-3], [9:0-3-8,Edge], [14:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.51	Vert(LL)	-0.04	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.34	Vert(CT)	-0.09	9-10	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S		Wind(LL)	0.02	9-10	>999	240	Weight: 89 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
5-6: 2x6 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-14,7-9: 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 14=0-3-8, 12=0-3-8, 9=0-3-8
Max Horz 14=-161(LC 6)
Max Uplift 14=-144(LC 8), 12=-107(LC 8), 9=-163(LC 9)
Max Grav 14=501(LC 1), 12=1213(LC 1), 9=639(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-454/159, 3-4=-34/296, 4-5=-33/295, 5-6=-473/229, 6-7=-605/184, 2-14=-451/174, 7-9=-583/210
BOT CHORD 13-14=-109/315, 12-13=-110/311, 10-12=-103/395, 9-10=-28/388
WEBS 3-12=-525/24, 4-12=-446/191, 5-12=-626/3

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 14=144, 12=107, 9=163.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	B1	Half Hip Girder	1	2	I45767980
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:07 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-9p8t6zAagbr1VVfZLNzyG4IJA39vuQhZGZ1FYxzORp6

-0-10-8	4-7-11	12-1-8	19-7-4	27-1-0	31-2-14
0-10-8	4-7-11	7-5-12	7-5-12	7-5-12	4-1-14

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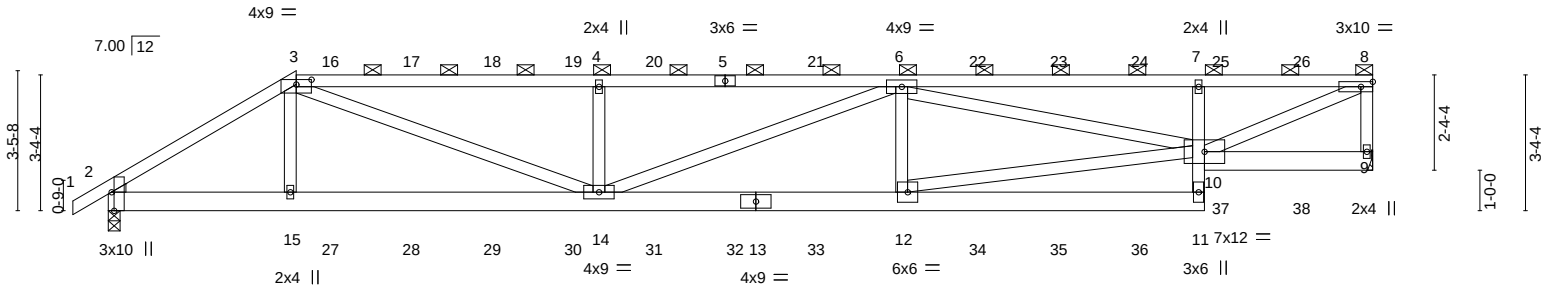

4-7-11	12-1-8	19-7-4	27-1-0	31-2-14
4-7-11	7-5-12	7-5-12	7-5-12	4-1-14

Plate Offsets (X,Y)-- [2:0-5-8,Edge], [3:0-4-8,0-1-7]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.55	Vert(LL)	-0.18	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.33	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.51	Horz(CT)	0.04	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	12-14	>999	240	Weight: 293 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
3-5: 2x4 SPF 2100F 1.8E
BOT CHORD 2x6 SPF No.2 *Except*
7-11: 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-3 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 9=Mechanical, 2=0-3-8
Max Horz 2=104(LC 26)
Max Uplift 9=-363(LC 5), 2=-350(LC 5)
Max Grav 9=1914(LC 1), 2=2029(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3324/628, 3-4=-5007/968, 4-6=-5004/967, 6-7=-3436/685, 7-8=-3437/661, 8-9=-1739/368
BOT CHORD 2-15=-580/2695, 14-15=-579/2675, 12-14=-937/4864, 11-12=-115/741, 7-10=-554/247
WEBS 3-15=-23/445, 3-14=-508/2565, 4-14=-770/332, 6-12=-354/256, 10-12=-830/4161, 6-10=-1479/234, 8-10=-727/3712

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 9=363, 2=350.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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Chesterfield, MO 63017

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 96 lb down and 59 lb up at 5-5-4, 98 lb down and 59 lb up at 7-5-4, 98 lb down and 59 lb up at 9-5-4, 98 lb down and 59 lb up at 11-5-4, 98 lb down and 59 lb up at 13-5-4, 98 lb down and 59 lb up at 15-5-4, 98 lb down and 59 lb up at 17-5-4, 98 lb down and 59 lb up at 19-5-4, 98 lb down and 59 lb up at 21-5-4, 98 lb down and 59 lb up at 23-5-4, 98 lb down and 59 lb up at 25-5-4, and 99 lb down and 60 lb up at 27-5-4, and 99 lb down and 60 lb up at 29-5-4 on top chord, and 202 lb down and 121 lb up at 4-7-11, 32 lb down at 5-5-4, 32 lb down at 7-5-4, 32 lb down at 9-5-4, 32 lb down at 11-5-4, 32 lb down at 13-5-4, 32 lb down at 15-5-4, 32 lb down at 17-5-4, 32 lb down at 19-5-4, 32 lb down at 21-5-4, 32 lb down at 23-5-4, 32 lb down at 25-5-4, and 32 lb down at 27-5-4, and 32 lb down at 29-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

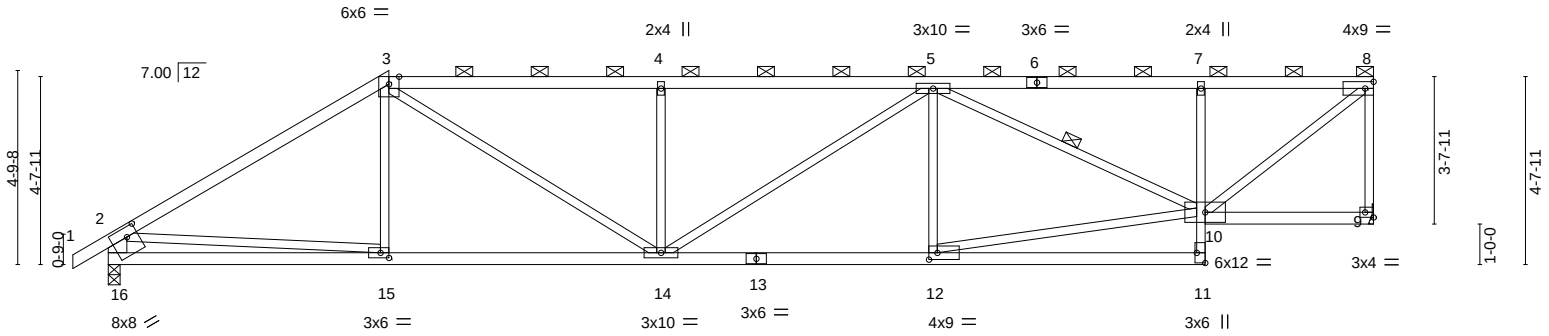
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-70, 3-8=-70, 2-11=-20, 9-10=-20
   Concentrated Loads (lb)
   Vert: 5=-44(F) 15=-202(F) 6=-44(F) 12=-24(F) 16=-44(F) 17=-44(F) 18=-44(F) 19=-44(F) 20=-44(F) 21=-44(F) 22=-44(F) 23=-44(F) 24=-44(F) 25=-44(F) 26=-44(F) 27=-24(F) 28=-24(F) 29=-24(F) 30=-24(F) 31=-24(F) 32=-24(F) 33=-24(F) 34=-24(F) 35=-24(F) 36=-24(F) 37=-24(F) 38=-24(F)

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	B2	Half Hip	1	1	I45767981
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:09 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-5BGeXfBqCC5llppyTn?QLVNZqtpwMGMsksWMdqzORp4

-0-10-8	6-11-2	13-7-12	20-4-6	27-1-0	31-2-14
0-10-8	6-11-2	6-8-10	6-8-10	6-8-10	4-1-14

Scale = 1:56.9



6-11-2	13-7-12	20-4-6	27-1-0	31-2-14
6-11-2	6-8-10	6-8-10	6-8-10	4-1-14

Plate Offsets (X,Y)-- [9:Edge,0-1-8], [11:Edge,0-2-8], [12:0-2-8,0-2-0], [15:0-2-8,0-1-8], [16:0-3-4,0-2-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.92	Vert(LL)	-0.16	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.31	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.76	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.09	12-14	>999	240	Weight: 123 lb	FT = 10%

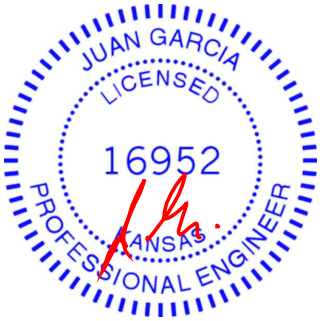
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
7-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 3-8.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10

REACTIONS. (size) 9=Mechanical, 16=0-3-8
Max Horz 16=136(LC 5)
Max Uplift 9=-71(LC 5), 16=-10(LC 5)
Max Grav 9=1389(LC 1), 16=1469(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2083/60, 3-4=-2503/114, 4-5=-2500/113, 5-7=-1529/83, 7-8=-1532/80, 8-9=-1330/92, 2-16=-1405/46
BOT CHORD 15-16=-178/666, 14-15=-113/1691, 12-14=-136/2313, 7-10=-410/99
WEBS 3-14=-115/1049, 4-14=-531/124, 10-12=-140/2199, 5-10=-879/29, 8-10=-112/1952, 2-15=-99/1193

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9, 16.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



April 22,2021

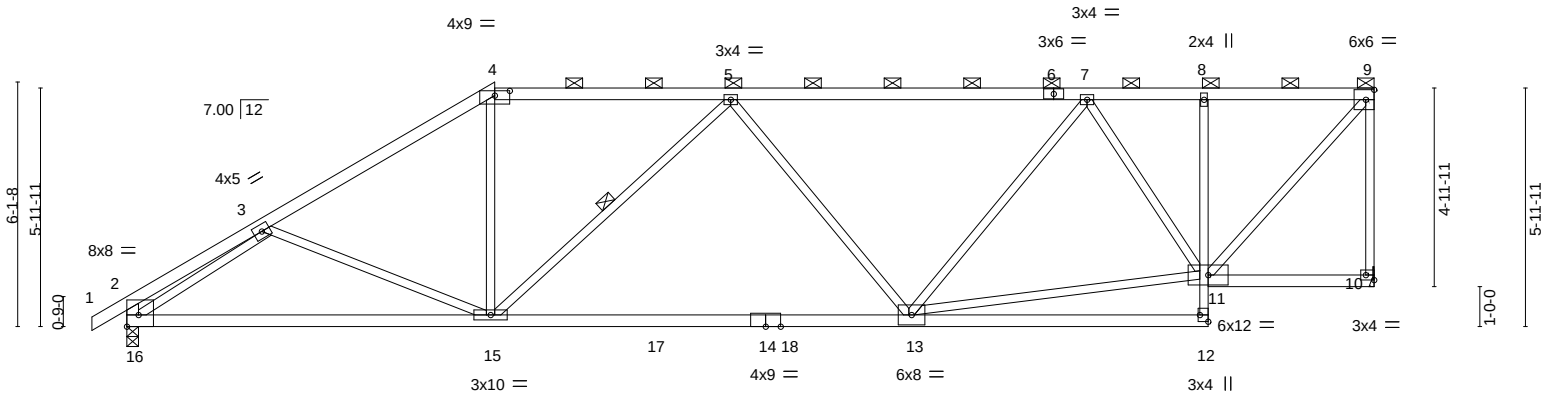
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	B3	Half Hip	1	1	I45767982
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:10 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-ZOq0k?CSzWDcMyO81VWfuiwlaH9_5jp?yWGv9GzORp3

-0-10-8 3-5-15 9-2-9 15-1-8 24-0-10 27-1-0 31-2-14
0-10-8 3-5-15 5-8-10 5-10-15 8-11-2 3-0-6 4-1-14

Scale = 1:57.7



9-2-9 19-7-1 27-1-0 31-2-14
9-2-9 10-4-8 7-5-15 4-1-14

Plate Offsets (X,Y)-- [2:Edge,0-3-8], [4:0-4-8,0-1-7], [10:Edge,0-1-8], [12:Edge,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.86	Vert(LL)	-0.33	13-15	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.56	13-15	>664	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	13-15	>999	240	Weight: 128 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
4-6: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
8-12: 2x3 SPF No.2, 10-11: 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-16: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-0-1 oc purlins, except end verticals, and 2-0-0 oc purlins (4-3-12 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-15

REACTIONS. (size) 10=Mechanical, 16=0-3-8
Max Horz 16=178(LC 5)
Max Uplift 10=-73(LC 5)
Max Grav 10=1456(LC 2), 16=1519(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-480/0, 3-4=-2066/35, 4-5=-1707/48, 5-7=-1876/33, 7-8=-1113/51, 8-9=-1123/51, 9-10=-1373/92, 2-16=-373/0
BOT CHORD 15-16=-174/1764, 13-15=-160/2026
WEBS 4-15=0/709, 5-15=-594/161, 5-13=-332/109, 7-13=0/456, 11-13=-123/1509, 7-11=-924/82, 9-11=-85/1677, 3-16=-1730/76

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

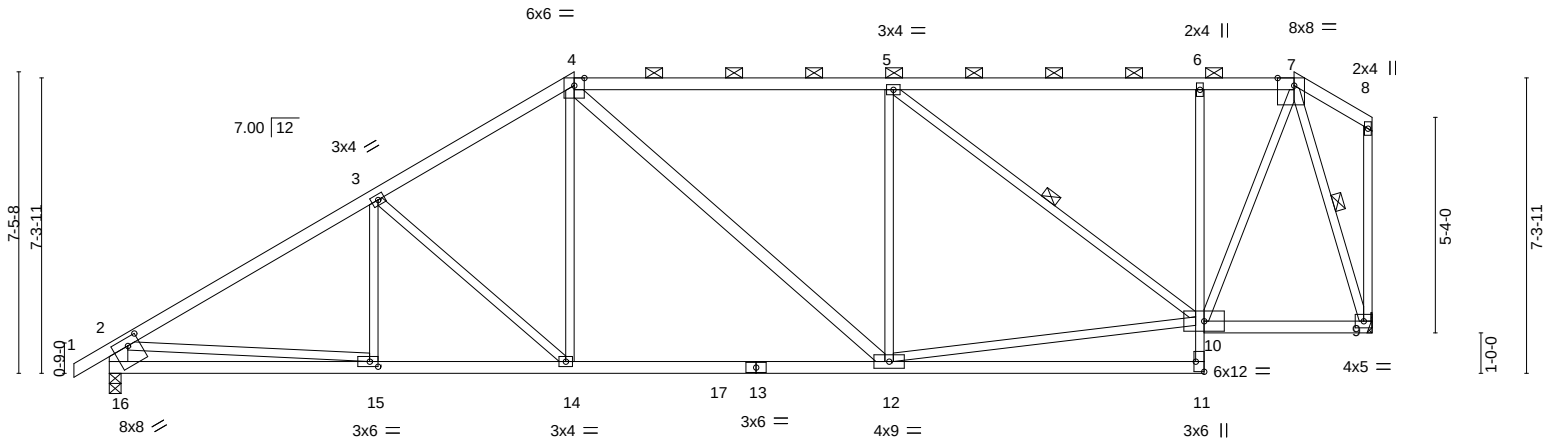
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	B4	Hip	1	1	I45767983
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:11 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-1aOOyKD4kpLT_6zKaC1uQwTwzgTfq9R9BA?ThizORp2

-0-10-8 | 6-6-9 | 11-6-0 | 19-3-8 | 27-1-0 | 29-3-11 | 31-2-14
0-10-8 | 6-6-9 | 4-11-8 | 7-9-8 | 7-9-8 | 2-2-11 | 1-11-3

Scale = 1:57.0



6-6-9 | 11-6-0 | 19-3-8 | 27-1-0 | 29-3-11 | 31-2-14
6-6-9 | 4-11-8 | 7-9-8 | 7-9-8 | 2-2-11 | 1-11-3

Plate Offsets (X,Y)-- [7:0-4-15,Edge], [11:Edge,0-2-8], [15:0-2-8,0-1-8], [16:0-3-8,0-2-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.18	12-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.30	12-14	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.78	Horz(CT)	0.06	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	12-14	>999	240	Weight: 145 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
6-11: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
4-12: 2x4 SPF No.2, 2-16: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-6-12 oc purlins, except end verticals, and 2-0-0 oc purlins (2-2-0 max.): 4-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-10, 7-9

REACTIONS. (size) 16=0-3-8, 9=Mechanical
Max Horz 16=213(LC 5)
Max Uplift 16=-4(LC 8), 9=-22(LC 5)
Max Grav 16=1530(LC 13), 9=1451(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2154/3, 3-4=-1840/40, 4-5=-1608/47, 5-6=-896/51, 6-7=-900/51, 2-16=-1413/42
BOT CHORD 15-16=-215/701, 14-15=-132/1815, 12-14=-114/1529, 6-10=-451/101, 9-10=-54/397
WEBS 3-14=-405/98, 4-14=0/544, 4-12=-123/276, 10-12=-120/1497, 5-10=-906/38, 7-10=-74/1398, 2-15=0/1213, 7-9=-1357/81

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 9.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	C7	Hip	1	1	I45767984

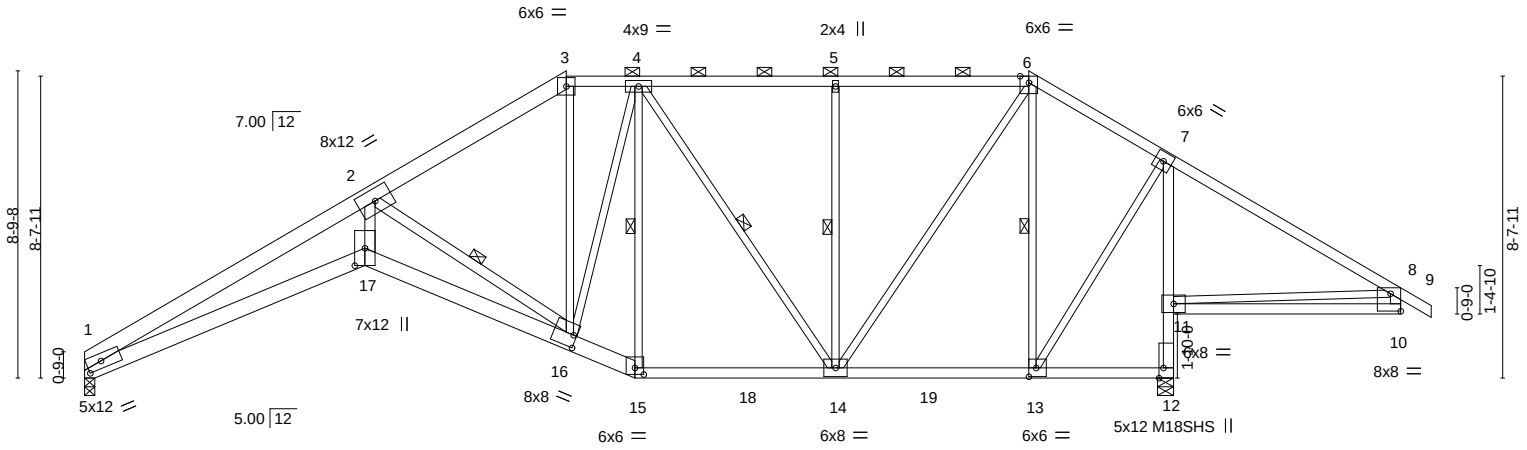
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:19 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-o6tQd4J5sHMKxLat2uAnlcoJEv8BikGK1QxuyFzORow

8-0-4	13-9-7	15-9-0	21-5-14	27-0-5	31-2-0	37-8-0	38-6-8
8-0-4	5-9-3	1-11-9	5-8-14	5-6-6	4-1-11	6-6-0	0-10-8

Scale = 1:65.9



8-0-4	13-9-7	15-9-0	21-5-14	27-0-5	31-2-0	37-8-0
8-0-4	5-9-3	1-11-9	5-8-14	5-6-6	4-1-11	6-6-0

Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [10:Edge,0-6-0], [12:0-3-8,Edge], [13:0-2-8,0-3-0], [15:0-3-0,0-2-4], [16:0-1-2,0-4-4], [17:0-5-15,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.44	17	>848	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.97	Vert(CT)	-0.74	17	>498	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.51	12	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.29	17	>999	240	Weight: 190 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF 1650F 1.4E

BOT CHORD 2x4 SPF No.2 *Except*
1-17: 2x6 SPF 1650F 1.4E, 15-17: 2x6 SPF No.2
7-12: 2x4 SPF 2100F 1.8E

WEBS 2x3 SPF No.2 *Except*
2-17,2-16,8-10: 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-11 max.): 3-6.

BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

WEBS 1 Row at midpt 2-16, 4-15, 4-14, 5-14, 6-13

REACTIONS. (size) 1=0-3-8, 12=0-5-8
Max Horz 1=215(LC 5)
Max Uplift 1=-154(LC 8), 12=-185(LC 9)
Max Grav 1=1405(LC 23), 12=2229(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-5706/756, 2-3=-1710/230, 3-4=-1440/241, 4-5=-1080/166, 5-6=-1082/167, 6-7=-560/128, 7-8=-105/653

BOT CHORD 1-17=-777/5291, 16-17=-726/4904, 15-16=-221/1446, 14-15=-201/1304, 13-14=-85/471, 12-13=-376/127, 11-12=-2231/223, 7-11=-2033/230, 10-11=-112/266

WEBS 2-17=-482/4100, 2-16=-3902/721, 3-16=-56/612, 4-16=-99/695, 4-15=-488/124, 4-14=-482/90, 5-14=-453/183, 6-14=-167/1134, 6-13=-932/157, 7-13=-110/1394, 8-11=-743/276

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=154, 12=185.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

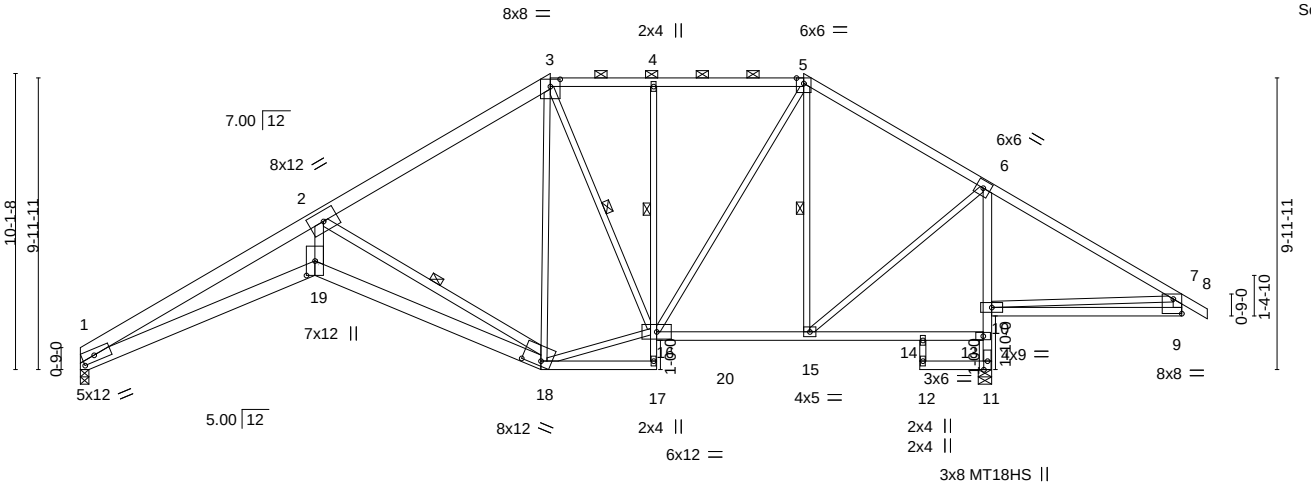
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT	I45767985
210402	C8	Hip	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:20 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-GJRorPKjdaUBZV93cbi0IpKUJlViRBDUG4hRUhzORov

8-0-4	16-0-14	19-8-8	24-8-14	28-8-8	31-2-0	37-8-0	38-6-8
8-0-4	8-0-10	3-7-10	5-0-6	3-11-10	2-5-8	6-6-0	0-10-8

Scale = 1:78.8



8-0-4	15-9-0	19-8-8	24-8-14	28-8-8	31-2-0	37-8-0
8-0-4	7-8-12	3-11-8	5-0-6	3-11-10	2-5-8	6-6-0

Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [3:0-4-0,0-3-0], [9:Edge,0-6-0], [18:0-7-12,0-2-0], [19:0-5-15,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.71	Vert(LL)	-0.45	18-19	>826	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.95	Vert(CT)	-0.79	18-19	>470	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.59	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.34	19	>999	240	Weight: 192 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	1-3: 2x6 SPF 1650F 1.4E
BOT CHORD	2x4 SPF No.2 *Except*
	1-19,18-19: 2x6 SPF 1650F 1.4E, 4-17: 2x3 SPF No.2
WEBS	2x3 SPF No.2 *Except*
	2-19,7-9: 2x4 SPF No.2, 2-18: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-11-11 oc purlins, except end verticals, and 2-0-0 oc purlins (5-1-15 max.): 3-5.
BOT CHORD	Rigid ceiling directly applied or 3-2-8 oc bracing. Except:
	1 Row at midpt 4-16
WEBS	1 Row at midpt 2-18, 3-16, 5-15

REACTIONS. (size) 1=0-3-8, 11=0-5-8
Max Horz 1=250(LC 5)
Max Uplift 1=-168(LC 8), 11=-212(LC 9)
Max Grav 1=1403(LC 15), 11=2229(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	1-2=-5948/910, 2-3=-1366/229, 3-4=-1073/220, 4-5=-1077/221, 5-6=-853/162, 6-7=-107/659
BOT CHORD	1-19=-947/5571, 18-19=-894/5197, 4-16=-336/155, 15-16=-69/697, 14-15=-421/144, 13-14=-421/144, 11-13=-2198/236, 10-13=-2126/254, 6-10=-1947/267, 9-10=-102/258
WEBS	2-19=-605/4424, 2-18=-4369/890, 3-18=-69/362, 16-18=-126/1127, 5-16=-139/781, 5-15=-675/118, 6-15=-59/1378, 7-10=-735/265

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=168, 11=212.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	C9	Hip	1	1	I45767986
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:22 2021 Page 1
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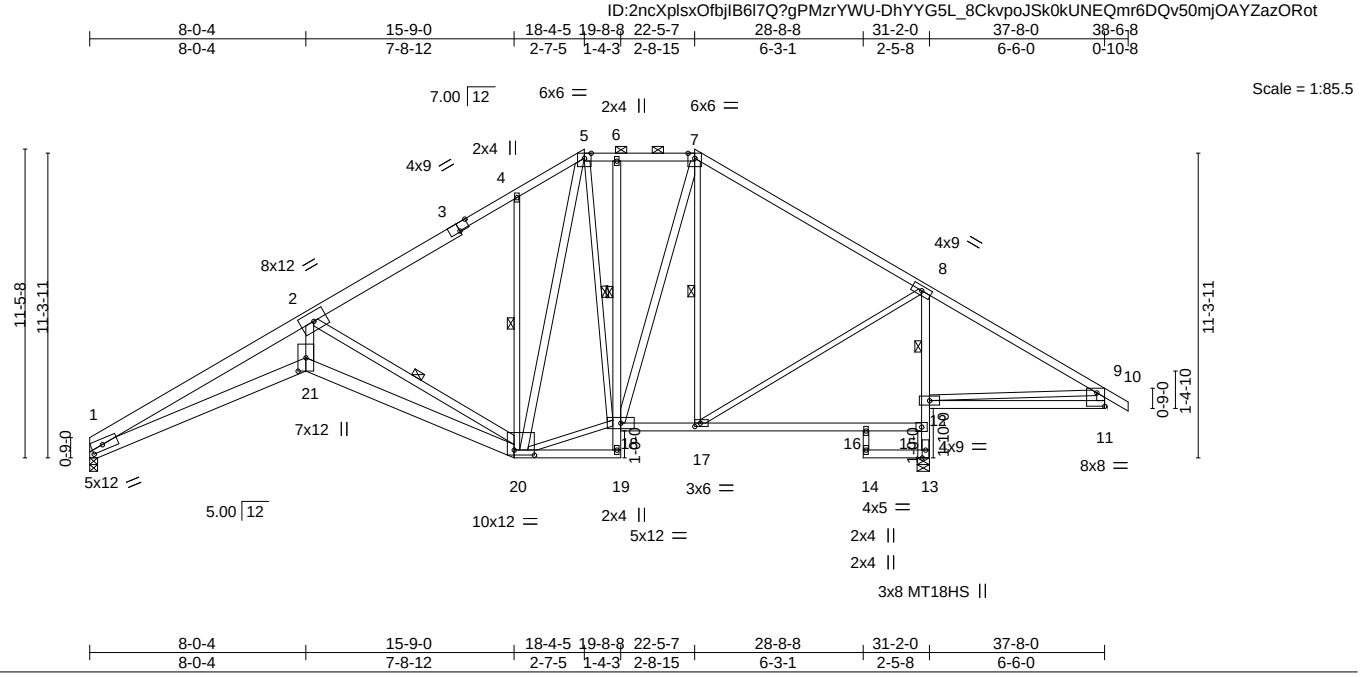

Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [3:0-4-8,Edge], [11:Edge,0-6-0], [17:0-2-8,0-1-8], [20:0-9-0,0-2-4], [21:0-5-15,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.44	20-21	>846	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.80	Vert(CT)	-0.78	20-21	>477	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.98	Horz(CT)	0.61	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.35	21	>999	240	Weight: 215 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF 1650F 1.4E
BOT CHORD 2x4 SPF No.2 *Except*
1-21,20-21: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
2-21,5-20,7-18,9-11: 2x4 SPF No.2, 2-20: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-11-7 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 2-8-6 oc bracing. Except:
1 Row at midpt 6-18, 8-12
WEBS 1 Row at midpt 2-20, 4-20, 5-18, 7-17

REACTIONS. (size) 1=0-3-8, 13=0-5-8
Max Horz 1=285(LC 5)
Max Uplift 1=-178(LC 8), 13=-235(LC 9)
Max Grav 1=1426(LC 15), 13=2260(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6110/1007, 2-4=-1342/252, 4-5=-1320/380, 5-6=-887/255, 6-7=-886/255, 7-8=-1005/214, 8-9=-101/645
BOT CHORD 1-21=-1060/5745, 20-21=-1000/5361, 17-18=-23/821, 16-17=-364/125, 15-16=-364/125, 13-15=-2192/259, 12-15=-2053/288, 8-12=-1921/306
WEBS 2-21=-690/4556, 2-20=-4471/953, 4-20=-407/228, 5-20=-298/822, 18-20=-78/947, 7-18=-147/555, 7-17=-460/112, 8-17=-37/1295, 9-12=-643/219

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=178, 13=235.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT	I45767987
210402	C10	Piggyback Base	1	1	Job Reference (optional)	

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:13 2021 Page 1

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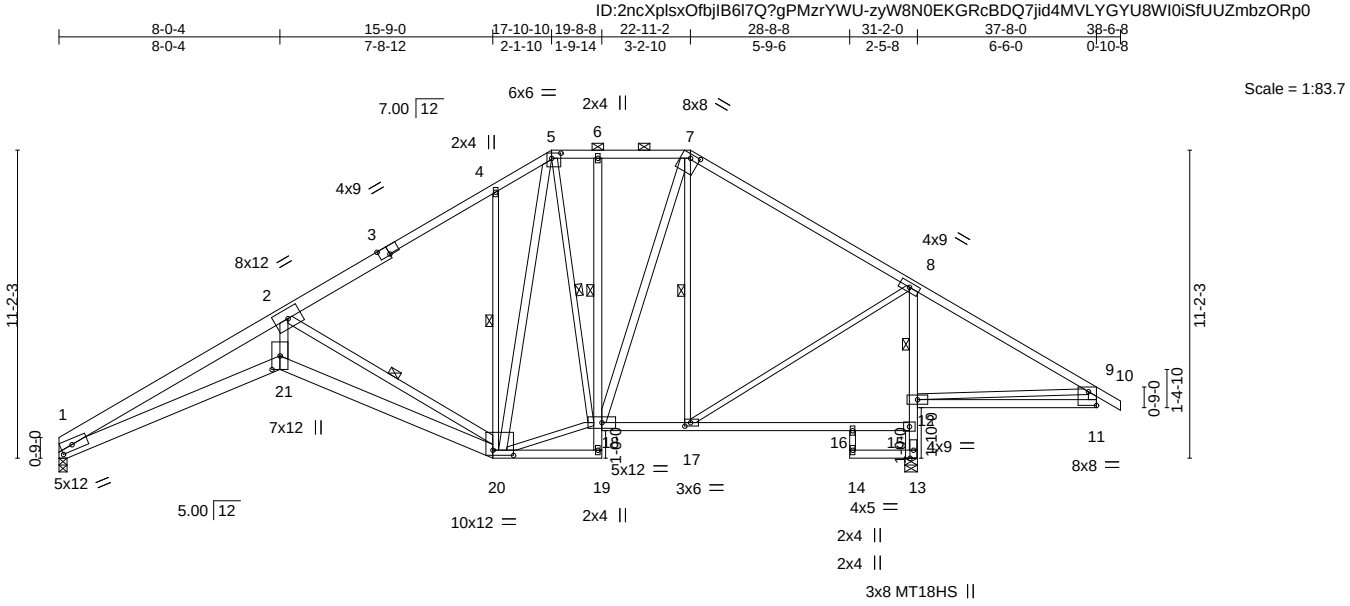

Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [3:0-4-8,Edge], [5:0-4-0,0-2-4], [7:0-4-0,0-1-11], [11:Edge,0-6-0], [17:0-2-8,0-1-8], [20:0-9-0,0-2-4], [21:0-5-15,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.88	Vert(LL)	-0.44	20-21	>841	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.79	Vert(CT)	-0.78	20-21	>474	240	MT18HS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.61	13	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.35	21	>999	240	Weight: 212 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x6 SPF 1650F 1.4E

BOT CHORD 2x4 SPF No.2 *Except*
1-21,20-21: 2x6 SPF 1650F 1.4E

WEBS 2x3 SPF No.2 *Except*
2-21,7-18,9-11,5-20: 2x4 SPF No.2, 2-20: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-15 max.): 5-7.

BOT CHORD Rigid ceiling directly applied or 2-8-14 oc bracing. Except:
1 Row at midpt 6-18, 8-12

WEBS 1 Row at midpt 2-20, 4-20, 7-17, 5-18

REACTIONS. (size) 1=0-3-8, 13=0-5-8
Max Horz 1=278(LC 5)
Max Uplift 1=-175(LC 8), 13=-230(LC 9)
Max Grav 1=1419(LC 15), 13=2260(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-6100/1005, 2-4=-1337/250, 4-5=-1369/398, 5-6=-893/249, 6-7=-893/248, 7-8=-988/205, 8-9=-102/648

BOT CHORD 1-21=-1058/5737, 20-21=-998/5354, 17-18=-33/788, 16-17=-374/130, 15-16=-374/130, 13-15=-2195/254, 12-15=-2057/282, 8-12=-1922/299

WEBS 2-21=-688/4549, 2-20=-4474/956, 4-20=-503/262, 7-18=-143/574, 7-17=-488/107, 8-17=-33/1294, 9-12=-662/229, 5-20=-333/915, 18-20=-90/960

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=175, 13=230.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	C11	Piggyback Base	3	1	I45767988
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:14 2021 Page 1
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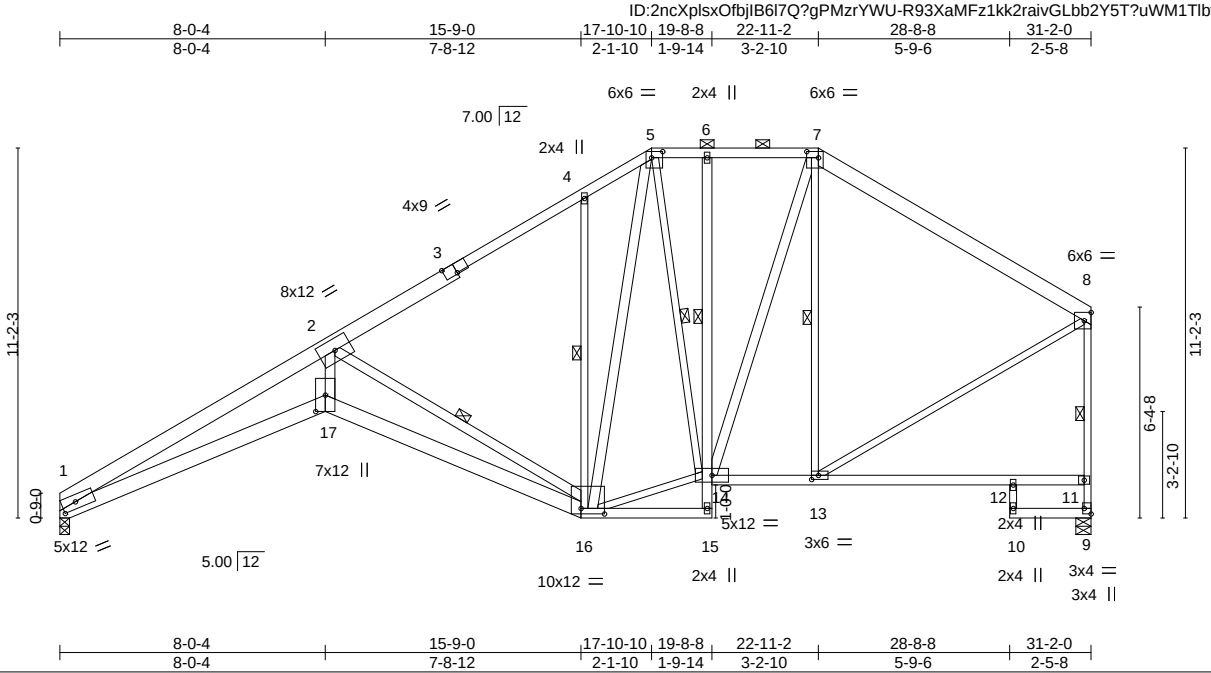

Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [3:0-4-8,Edge], [5:0-4-0,0-2-4], [7:0-4-4,0-2-4], [9:Edge,0-2-8], [13:0-2-8,0-1-8], [16:0-8-8,0-2-0], [17:0-5-15,0-3-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.44	17	>840	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.80	16-17	>466	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.58	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.36	17	>999	240	Weight: 194 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
7-8: 2x6 SPF No.2, 1-3: 2x6 SPF 1650F 1.4E
BOT CHORD 2x4 SPF No.2 *Except*
1-17,16-17: 2x6 SPF 1650F 1.4E
WEBS 2x3 SPF No.2 *Except*
2-17,5-16,7-14: 2x4 SPF No.2, 2-16: 2x4 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-9-6 oc purlins, except end verticals, and 2-0-0 oc purlins (5-6-2 max.): 5-7.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
8-8-2 oc bracing: 1-17
8-11-2 oc bracing: 16-17.
1 Row at midpt 6-14
WEBS 1 Row at midpt 2-16, 4-16, 5-14, 7-13, 8-9

REACTIONS. (size) 1=0-3-8, 9=0-5-8
Max Horz 1=364(LC 7)
Max Uplift 1=-175(LC 8), 9=-112(LC 8)
Max Grav 1=1391(LC 1), 9=1392(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-5830/973, 2-4=-1471/250, 4-5=-1443/397, 5-6=-1013/247, 6-7=-1016/246, 7-8=-1133/196, 9-11=-1364/129, 8-11=-1316/160
BOT CHORD 1-17=-1013/5259, 16-17=-956/4914, 13-14=-96/877
WEBS 2-17=-654/4083, 2-16=-4043/927, 4-16=-496/261, 5-16=-336/766, 14-16=-159/987, 7-14=-156/519, 7-13=-356/129, 8-13=-56/1006

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 1 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=175, 9=112.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	C12	Piggyback Base	4	1	I45767989
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:15 2021 Page 1
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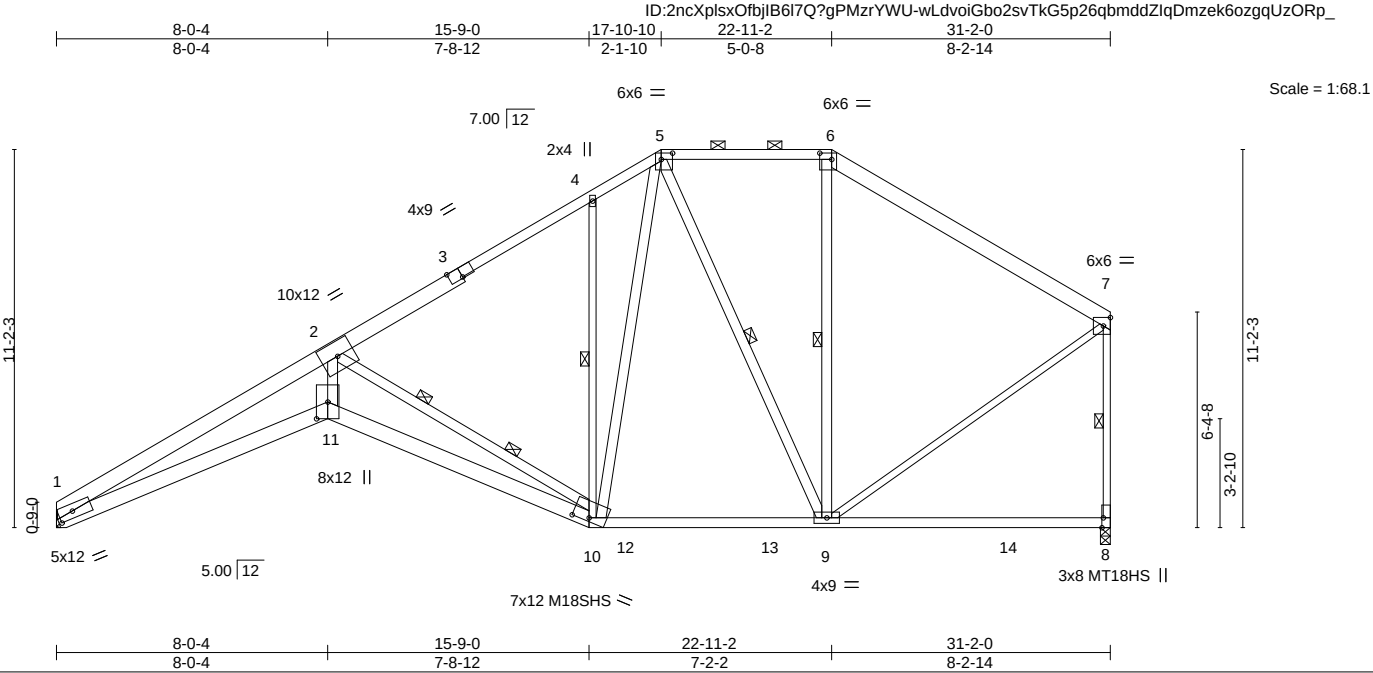

Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [3:0-4-8,Edge], [5:0-4-0,0-2-4], [6:0-4-4,0-2-4], [8:0-3-8,Edge], [10:0-6-0,0-1-5], [11:0-5-15,0-4-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.78	Vert(LL)	-0.49	10-11	>761	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.78	Vert(CT)	-0.85	10-11	>436	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.77	Horz(CT)	0.58	8	n/a	n/a	MT18HS	197/144
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25	11	>999	240	Weight: 175 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2 *Except*
	6-7: 2x6 SPF No.2, 1-3: 2x6 SPF 1650F 1.4E
BOT CHORD	2x6 SPF 1650F 1.4E *Except*
	8-10: 2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	2-11,2-10: 2x4 SPF 2100F 1.8E, 4-10,7-8,7-9: 2x3 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-8-9 oc purlins, except end verticals, and 2-0-0 oc purlins (5-11-15 max.): 5-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 4-10, 5-9, 6-9, 7-8
	2 Rows at 1/3 pts 2-10

REACTIONS. (size) 1=Mechanical, 8=0-3-8
Max Horz 1=294(LC 7)
Max Uplift 1=-17(LC 8)
Max Grav 1=1525(LC 13), 8=1516(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	1-2=-6633/235, 2-4=-1553/90, 4-5=-1571/179, 5-6=-882/94, 6-7=-1102/83, 7-8=-1361/26
BOT CHORD	1-11=-314/6187, 10-11=-303/5774, 9-10=-58/1111
WEBS	2-11=-128/4883, 2-10=-4752/317, 4-10=-472/151, 5-10=-154/1182, 5-9=-483/90, 7-9=0/1093

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	C13	Hip	1	1	I45767990

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:16 2021 Page 1

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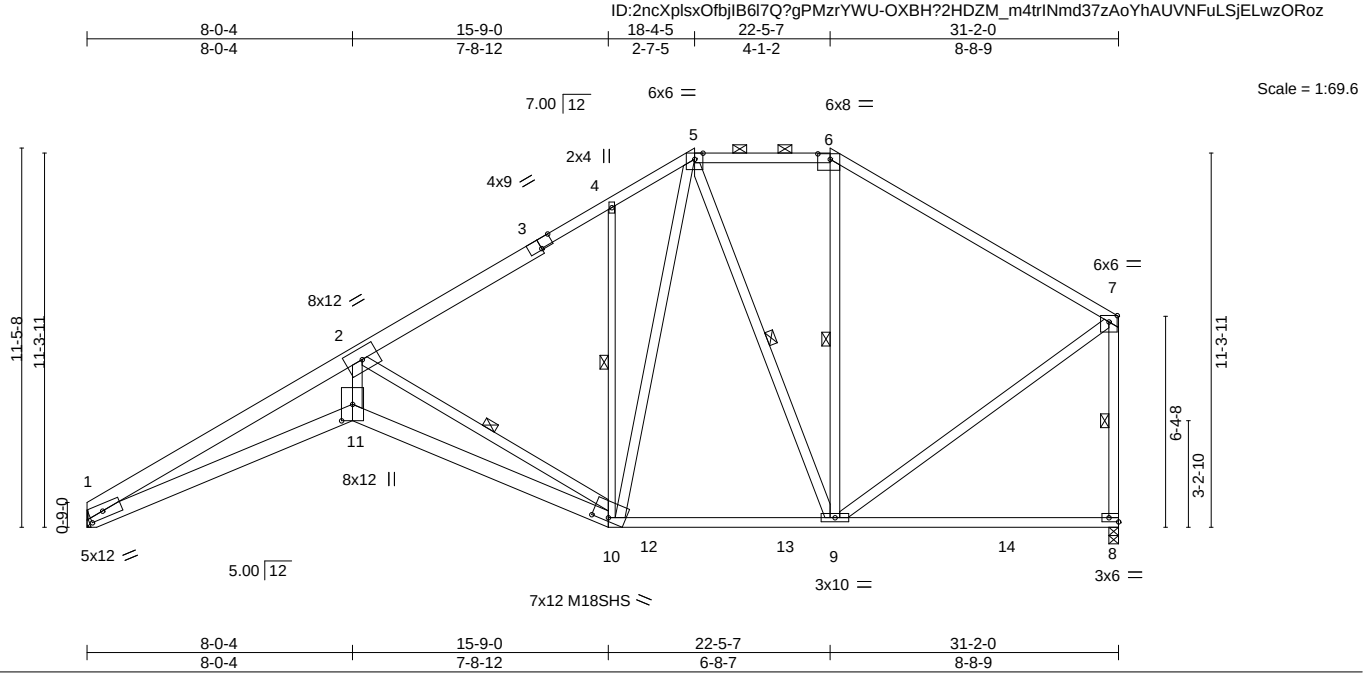

Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [3:0-4-8,Edge], [6:0-4-8,0-2-0], [8:Edge,0-1-8], [10:0-6-0,0-1-5], [11:0-5-15,0-4-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.83	Vert(LL)	-0.48	10-11	>770	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.77	Vert(CT)	-0.84	10-11	>441	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.57	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.25	11	>999	240	Weight: 176 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2 *Except*
6-7: 2x4 SPF 2100F 1.8E, 1-3: 2x6 SPF 1650F 1.4E

BOT CHORD 2x6 SPF 1650F 1.4E *Except*
8-10: 2x4 SPF No.2

WEBS 2x4 SPF No.2 *Except*
2-11,2-10: 2x4 SPF 2100F 1.8E, 4-10: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-10-6 max.): 5-6.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

WEBS 1 Row at midpt 2-10, 4-10, 5-9, 6-9, 7-8

REACTIONS. (size) 1=Mechanical, 8=0-3-8
Max Horz 1=302(LC 7)
Max Uplift 1=-19(LC 8)
Max Grav 1=1527(LC 13), 8=1519(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-6616/237, 2-4=-1550/91, 4-5=-1516/172, 5-6=-886/99, 6-7=-1129/90, 7-8=-1351/31

BOT CHORD 1-11=-294/6169, 10-11=-284/5756, 9-10=-51/1087

WEBS 2-11=-113/4871, 2-10=-4733/316, 4-10=-381/137, 5-10=-141/1087, 5-9=-492/99, 7-9=0/1072

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	C14	Half Hip	1	1	I45767991
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:18 2021 Page 1
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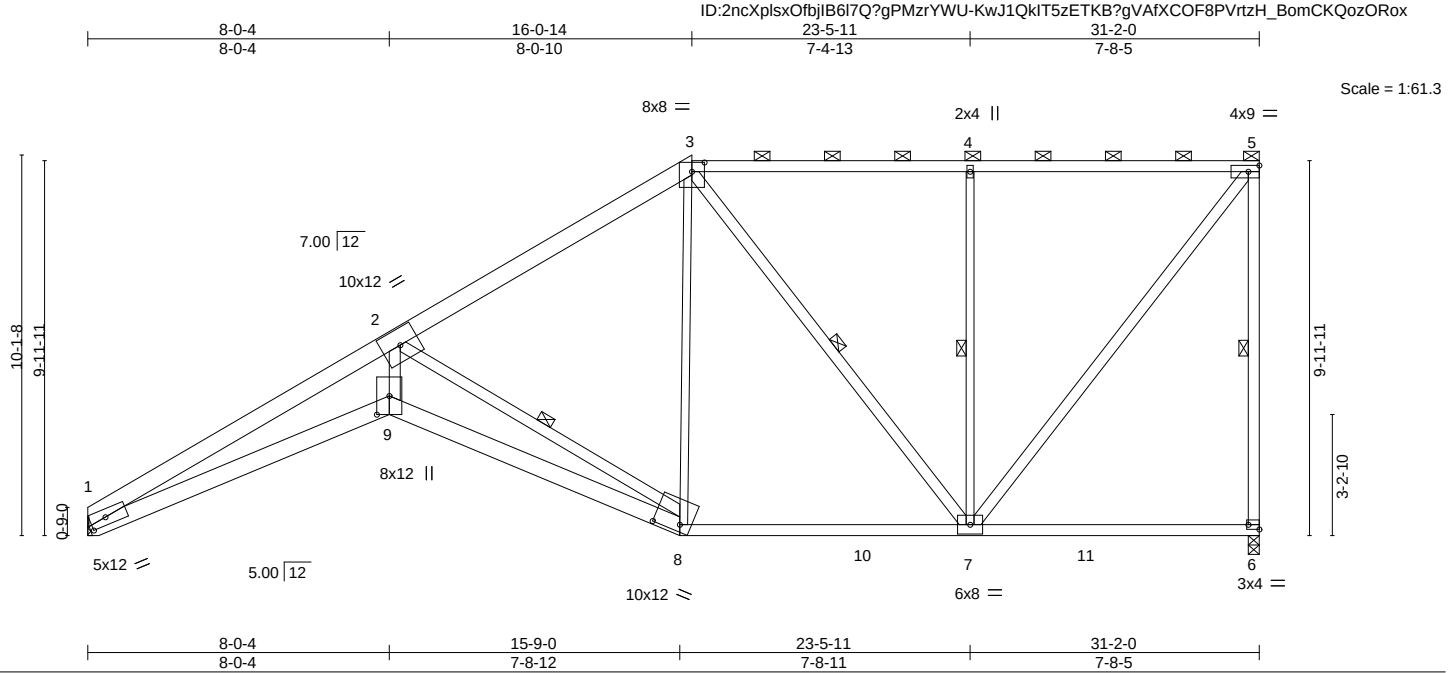


Plate Offsets (X,Y)-- [1:0-5-0,0-2-8], [3:0-4-0,0-3-0], [6:Edge,0-1-8], [8:0-8-8,0-2-4], [9:0-5-15,0-4-0]

LOADING (psf)		SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES GRIP
TCLL 25.0		Plate Grip DOL 1.15	TC 0.80	Vert(LL) -0.49 8-9 >755 360	MT20 197/144
TCDL 10.0		Lumber DOL 1.15	BC 0.78	Vert(CT) -0.85 8-9 >435 240	
BCLL 0.0	*	Rep Stress Incr YES	WB 0.99	Horz(CT) 0.58 6 n/a n/a	
BCDL 10.0		Code IRC2018/TPI2014	Matrix-S	Wind(LL) 0.28 9 >999 240	Weight: 164 lb FT = 10%

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.4E *Except*
3-5: 2x4 SPF No.2
BOT CHORD 2x6 SPF 1650F 1.4E *Except*
6-8: 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
2-9,2-8: 2x4 SPF 2100F 1.8E, 3-8,4-7: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins, except end verticals, and 2-0-0 oc purlins (4-8-2 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-6, 2-8, 3-7, 4-7

REACTIONS. (size) 1=Mechanical, 6=0-3-8
Max Horz 1=275(LC 8)
Max Uplift 6=-63(LC 5)
Max Grav 1=1521(LC 13), 6=1537(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-6439/382, 2-3=-1541/28, 3-4=-951/39, 4-5=-951/39, 5-6=-1384/99
BOT CHORD 1-9=-570/5932, 8-9=-543/5534, 7-8=-59/1233
WEBS 2-9=-323/4689, 2-8=-4579/511, 3-8=0/718, 3-7=-531/85, 4-7=-607/147, 5-7=-62/1524

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

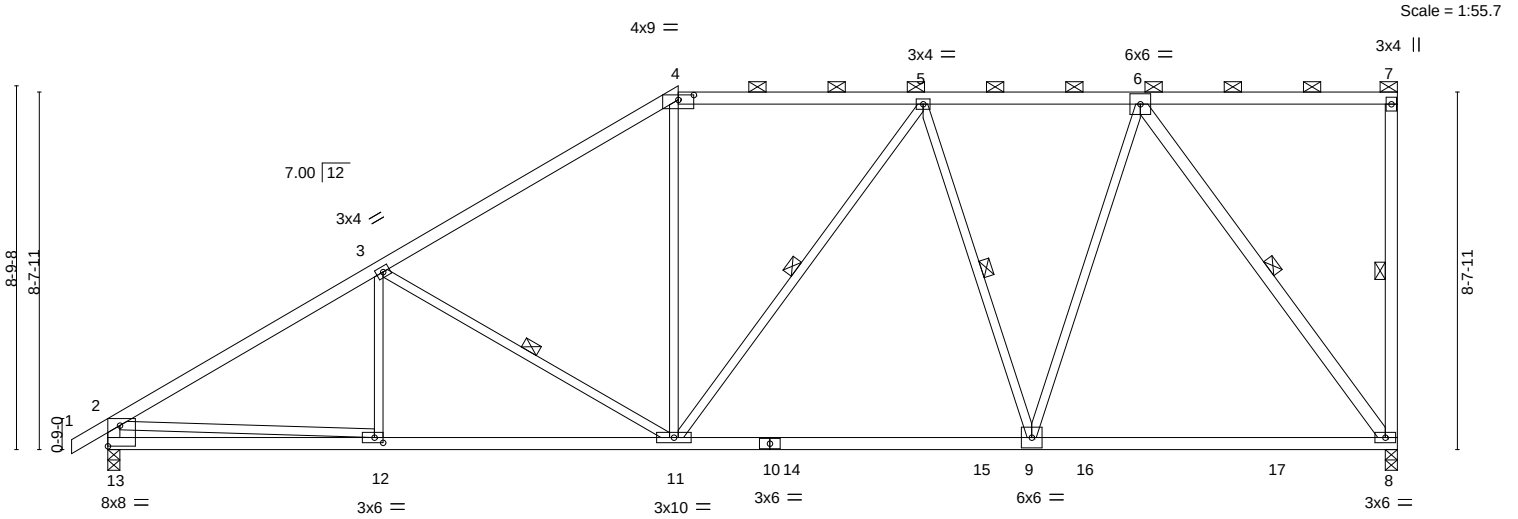
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	D3	Half Hip	1	1	I45767992
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:23 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-hu6wTRMcvVsmQyueHkFjvSy?lWXXecuwy2v550zORos

-0-10-8 6-6-9 13-9-7 19-8-7 24-11-7 31-2-0
0-10-8 6-6-9 7-2-14 5-11-1 5-3-0 6-2-9

Scale = 1:55.7



6-6-9 13-9-7 22-3-15 31-2-0
6-6-9 7-2-14 8-6-8 8-10-1

Plate Offsets (X,Y)-- [4:0-4-8,0-1-7], [12:0-2-8,0-1-8], [13:Edge,0-6-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.25	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.94	Vert(CT)	-0.41	8-9	>906	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	11-12	>999	240	Weight: 139 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 7-8,6-8,2-13: 2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-1-8 oc purlins, except end verticals, and 2-0-0 oc purlins (4-6-7 max.): 4-7.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 9-11.
WEBS	1 Row at midpt 7-8, 3-11, 5-11, 5-9, 6-8

REACTIONS. (size) 8=0-3-8, 13=0-3-8
Max Horz 13=341(LC 5)
Max Uplift 8=-251(LC 5), 13=-175(LC 8)
Max Grav 8=1527(LC 2), 13=1526(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2217/231, 3-4=-1724/199, 4-5=-1394/231, 5-6=-1179/142, 2-13=-1415/209
BOT CHORD 12-13=-343/700, 11-12=-337/1921, 9-11=-290/1316, 8-9=-231/906
WEBS 3-11=-640/240, 4-11=0/457, 5-11=-84/265, 5-9=-528/164, 6-9=-34/911, 6-8=-1513/276, 2-12=0/1322

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=251, 13=175.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

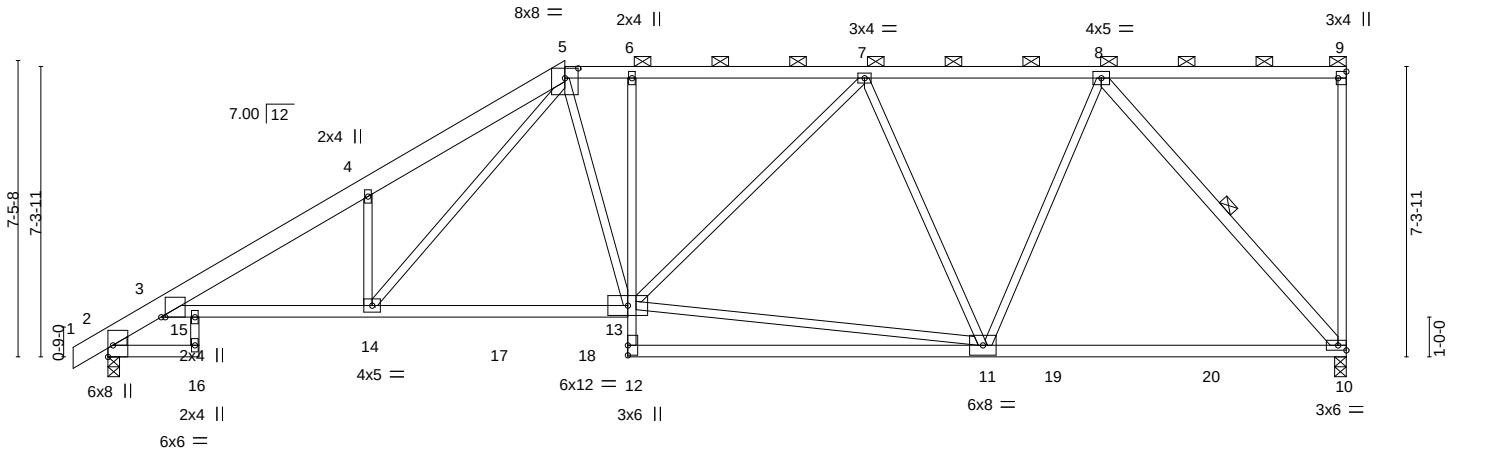
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	D4	Half Hip	1	1	I45767993
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:24 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-94gJgnNEgp_d26SqrRmySfVCawwkN?M3BiffeSzORor

-0-10-8 2-3-8 6-6-8 11-6-0 13-1-0 19-0-8 25-0-0 31-2-0
0-10-8 2-3-8 4-3-0 4-11-7 1-7-0 5-11-8 5-11-8 6-2-0

Scale = 1:58.0



2-3-8 6-6-8 11-6-0 13-1-0 22-0-4 31-2-0
2-3-8 4-3-0 4-11-7 1-7-0 8-11-4 9-1-12

Plate Offsets (X,Y)-- [2:Edge,0-1-8], [3:0-1-4,0-0-0], [5:0-4-0,0-3-0], [9:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	-0.27	10-11	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.69	Vert(CT)	-0.43	10-11	>868	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.99	Horz(CT)	0.25	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.15	14-15	>999	240	Weight: 154 lb	FT = 10%

LUMBER-

TOP CHORD 2x6 SP 2400F 2.0E *Except*
5-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF 2100F 1.8E *Except*
2-16: 2x4 SPF No.2, 6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
8-10: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins, except end verticals, and 2-0-0 oc purlins (4-0-1 max.): 5-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-10

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=282(LC 5)
Max Uplift 10=-255(LC 5), 2=-158(LC 8)
Max Grav 10=1491(LC 2), 2=1534(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1037/61, 3-4=-2884/266, 4-5=-3044/439, 5-6=-1869/267, 6-7=-1862/267, 7-8=-1385/150
BOT CHORD 3-15=-463/2543, 14-15=-463/2543, 13-14=-364/1742, 6-13=-346/143, 10-11=-255/1046
WEBS 5-13=-185/555, 11-13=-341/1527, 7-13=-61/400, 7-11=-685/217, 8-11=-27/883, 8-10=-1583/301, 4-14=-720/302, 5-14=-306/1397

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=255, 2=158.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

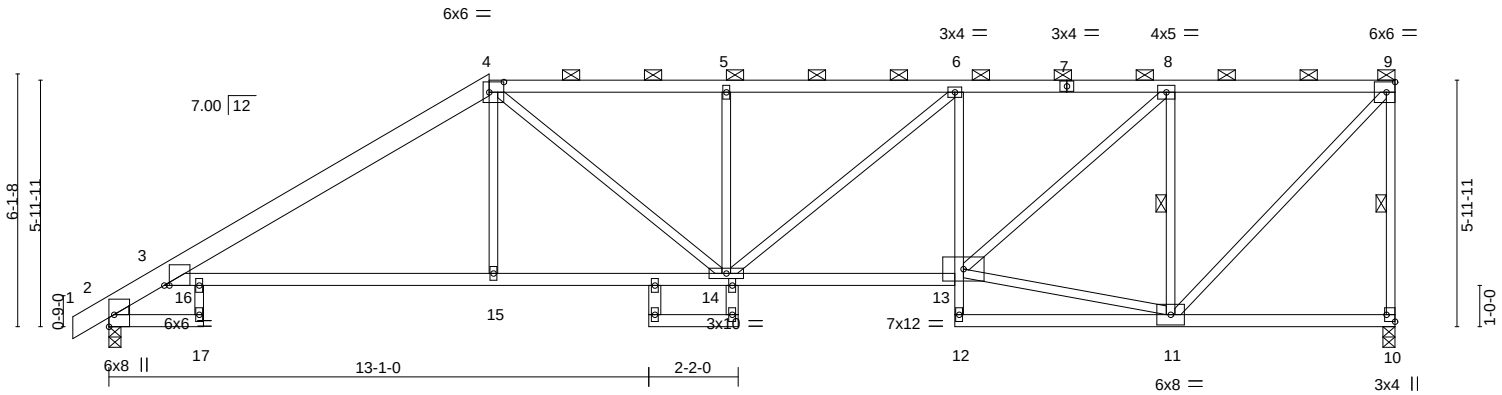
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	D5	Half Hip	1	1	I45767994
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:25 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-dGEhu7OsR76UgG10P9HB?t2LzJFk6YODPMOCAuzORoq

-0-10-8	2-3-8	9-2-9	14-11-9	20-6-0	25-8-12	31-2-0
0-10-8	2-3-8	6-11-1	5-8-15	5-6-7	5-2-12	5-5-4

Scale = 1:55.8



2-3-8	9-2-9	14-11-9	20-6-0	25-8-12	31-2-0
2-3-8	6-11-1	5-8-15	5-6-7	5-2-12	5-5-4

Plate Offsets (X,Y)-- [2:Edge,0-1-8], [3:0-1-8,0-0-0], [4:0-4-4,0-3-0], [10:Edge,0-2-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.72	Vert(LL)	-0.34	15-16	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.66	15-16	>565	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.56	Horz(CT)	0.35	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27	15-16	>999	240	Weight: 142 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-4: 2x6 SP DSS
BOT CHORD 2x4 SPF No.2 *Except*
3-13: 2x4 SPF 2100F 1.8E, 6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
18-20,14-19: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-4-13 oc purlins, except end verticals, and 2-0-0 oc purlins (3-5-6 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-10, 8-11

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=229(LC 5)
Max Uplift 10=-257(LC 5), 2=-137(LC 8)
Max Grav 10=1390(LC 1), 2=1464(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-927/78, 3-4=-2335/311, 4-5=-2326/390, 5-6=-2326/390, 6-8=-2154/365, 8-9=-1121/203, 9-10=-1343/276
BOT CHORD 3-16=-409/1986, 15-16=-409/1986, 14-15=-407/1992, 13-14=-462/2167, 6-13=-500/166
WEBS 4-15=0/351, 4-14=-247/576, 5-14=-415/187, 11-13=-244/1101, 8-13=-275/1378, 8-11=-1315/357, 9-11=-298/1625

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=257, 2=137.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 22,2021

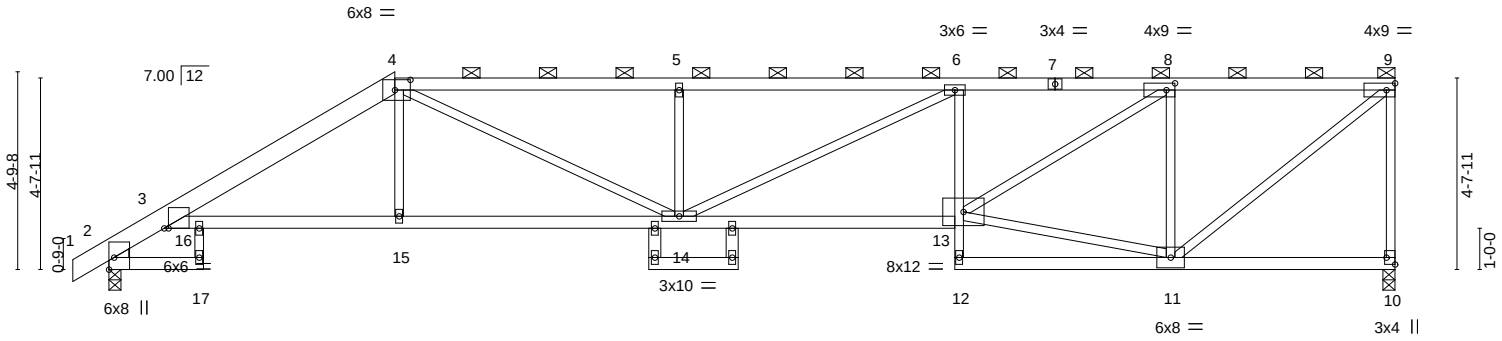
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	D6	Half Hip	1	1	I45767995
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:26 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-5To35TOUCQELHQcDzsoQX4aWKjcNrz?Me08liLzORop

-0-10-8	2-3-8	6-11-2	13-9-13	20-6-0	25-8-12	31-2-0
0-10-8	2-3-8	4-7-10	6-10-11	6-8-3	5-2-12	5-5-4

Scale = 1:55.8



2-3-8	6-11-2	13-9-13	20-6-0	25-8-12	31-2-0
2-3-8	4-7-10	6-10-11	6-8-3	5-2-12	5-5-4

Plate Offsets (X,Y)-- [2:Edge,0-1-8], [3:0-1-4,0-0-0], [4:0-4-8,0-3-0], [8:0-2-8,0-2-0], [10:Edge,0-2-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.27	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.52	13-14	>718	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.30	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.22	13-14	>999	240	Weight: 132 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SP DSS *Except*
4-7: 2x4 SPF 2100F 1.8E, 7-9: 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-13: 2x4 SPF 2100F 1.8E, 6-12: 2x3 SPF No.2
WEBS 2x3 SPF No.2 *Except*
18-20,19-21: 2x4 SPF No.2
WEDGE
Left: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-14 oc purlins, except end verticals, and 2-0-0 oc purlins (3-1-1 max.): 4-9.
BOT CHORD Rigid ceiling directly applied or 9-10-14 oc bracing.

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=176(LC 5)
Max Uplift 10=-259(LC 5), 2=-147(LC 5)
Max Grav 10=1390(LC 1), 2=1464(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-926/100, 3-4=-2639/402, 4-5=-3257/579, 5-6=-3257/579, 6-8=-3054/552, 8-9=-1461/269, 9-10=-1341/280
BOT CHORD 3-16=-463/2286, 15-16=-463/2286, 14-15=-461/2293, 13-14=-629/3085, 6-13=-488/175
WEBS 4-15=0/320, 4-14=-322/1177, 5-14=-514/219, 11-13=-290/1425, 8-13=-375/1876, 8-11=-1385/365, 9-11=-345/1867

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=259, 2=147.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	D7	Half Hip Girder	1	2	I45767996

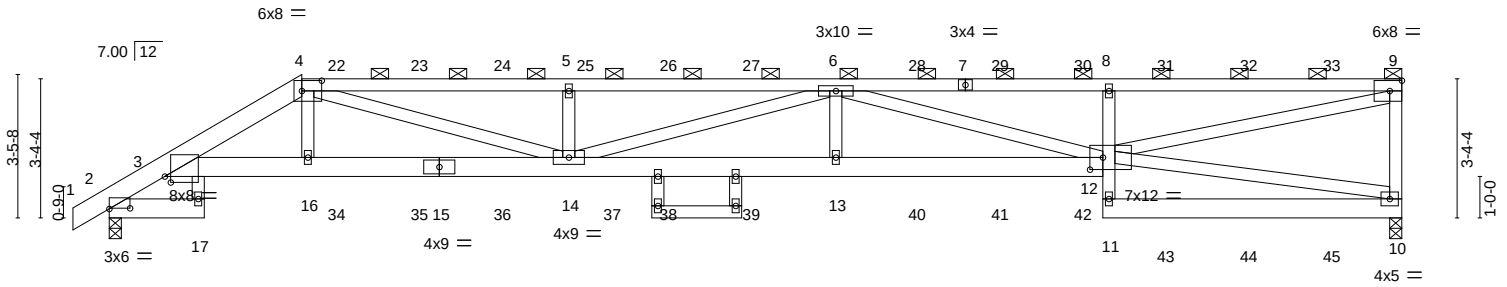
Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:29 2021 Page 1

ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-V1TCkURNVLdw8tLoe_M79jC5axjw2KeoK_MQJgzORom

-0-10-8	2-3-8	4-7-11	11-1-0	17-6-4	23-11-8	31-2-0
0-10-8	2-3-8	2-4-3	6-5-4	6-5-4	6-5-4	7-2-8

Scale = 1:55.6



2-3-8	4-7-11	11-1-0	17-6-4	23-11-8	31-2-0
2-3-8	2-4-3	6-5-4	6-5-4	6-5-4	7-2-8

Plate Offsets (X,Y)-- [2:0-6-0,0-0-3], [3:0-1-11,0-1-11], [4:0-5-12,0-3-0], [12:0-3-12,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.49	Vert(LL)	-0.31	13-14	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	-0.59	13-14	>631	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.67	Horz(CT)	0.21	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.27	13-14	>999	240	Weight: 344 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF 2100F 1.8E *Except* 1-4: 2x6 SP DSS

BOT CHORD 2x6 SP DSS *Except* 8-11,18-19: 2x4 SPF No.2

WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (5-9-11 max.): 4-9.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 2-17.

REACTIONS. (size) 10=0-3-8, 2=0-3-8
Max Horz 2=123(LC 5)
Max Uplift 10=-339(LC 5), 2=-341(LC 5)
Max Grav 10=1944(LC 1), 2=2091(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-1314/237, 3-4=-4861/988, 4-5=-7251/1232, 5-6=-7251/1232, 6-8=-5483/966, 8-9=-5350/961, 9-10=-1789/390

BOT CHORD 3-16=-961/4341, 14-16=-977/4401, 13-14=-1315/7816, 12-13=-1315/7816, 8-12=-658/294, 10-11=-46/411

WEBS 4-16=-209/821, 4-14=-394/2980, 5-14=-540/213, 6-14=-591/90, 6-13=0/442, 6-12=-2436/313, 10-12=-319/52, 9-12=-1002/5466

NOTES-

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=339, 2=341.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

Continued on page 2

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

NOTES-

12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 90 lb down and 42 lb up at 5-5-4, 91 lb down and 42 lb up at 7-5-4, 91 lb down and 42 lb up at 9-5-4, 91 lb down and 42 lb up at 11-5-4, 91 lb down and 42 lb up at 13-5-4, 99 lb down and 61 lb up at 15-5-4, 99 lb down and 61 lb up at 17-5-4, 99 lb down and 61 lb up at 19-5-4, 99 lb down and 61 lb up at 21-5-4, 99 lb down and 61 lb up at 23-5-4, 98 lb down and 59 lb up at 25-5-4, and 98 lb down and 59 lb up at 27-5-4, and 98 lb down and 59 lb up at 29-5-4 on top chord, and 100 lb down at 13-5-4, 223 lb down and 146 lb up at 4-7-11, 41 lb down and 29 lb up at 5-5-4, 41 lb down and 29 lb up at 7-5-4, 41 lb down and 29 lb up at 9-5-4, 41 lb down and 29 lb up at 11-5-4, 32 lb down at 15-5-4, 32 lb down at 17-5-4, 32 lb down at 19-5-4, 32 lb down at 21-5-4, 32 lb down at 23-5-4, 32 lb down at 25-5-4, and 32 lb down at 27-5-4, and 32 lb down at 29-5-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
13) Filler applied to ply: 1(Front)

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-9=-70, 2-17=-20, 3-12=-20, 10-11=-20
   Concentrated Loads (lb)
   Vert: 16=-223(B) 13=-23(B) 6=-45(B) 22=-29(B) 23=-29(B) 24=-29(B) 25=-29(B) 26=-29(B) 27=-45(B) 28=-45(B) 29=-45(B) 30=-45(B) 31=-44(B) 32=-44(B) 33=-44(B) 34=-39(B) 35=-39(B) 36=-39(B) 37=-39(B) 38=-100(F) 39=-23(B) 40=-23(B) 41=-23(B) 42=-23(B) 43=-24(B) 44=-24(B) 45=-24(B)
2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-58, 4-9=-58, 2-17=-20, 3-12=-20, 10-11=-20
   Concentrated Loads (lb)
   Vert: 16=-185(B) 13=-22(B) 6=-37(B) 22=-26(B) 23=-26(B) 24=-26(B) 25=-26(B) 26=-26(B) 27=-37(B) 28=-37(B) 29=-37(B) 30=-37(B) 31=-37(B) 32=-37(B) 33=-37(B) 34=-33(B) 35=-33(B) 36=-33(B) 37=-33(B) 38=-100(F) 39=-22(B) 40=-22(B) 41=-22(B) 42=-22(B) 43=-22(B) 44=-22(B) 45=-22(B)
3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
   Uniform Loads (plf)
   Vert: 1-4=-20, 4-9=-20, 2-17=-40, 3-12=-40, 10-11=-40
   Concentrated Loads (lb)
   Vert: 16=-104(B) 13=-30(B) 6=-19(B) 22=-28(B) 23=-28(B) 24=-28(B) 25=-28(B) 26=-28(B) 27=-19(B) 28=-19(B) 29=-19(B) 30=-19(B) 31=-19(B) 32=-19(B) 33=-19(B) 34=-21(B) 35=-21(B) 36=-21(B) 37=-21(B) 38=-100(F) 39=-30(B) 40=-30(B) 41=-30(B) 42=-30(B) 43=-31(B) 44=-31(B) 45=-31(B)
4) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-1, 2-4=-15, 4-9=29, 2-17=-12, 3-12=-12, 10-11=-12
   Horz: 1-2=-11, 2-4=3, 9-10=22
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 16=134(B) 13=-10(B) 6=23(B) 22=9(B) 23=5(B) 24=5(B) 25=5(B) 26=5(B) 27=23(B) 28=23(B) 29=23(B) 30=23(B) 31=22(B) 32=22(B) 33=22(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)
5) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=5, 2-4=11, 4-9=29, 2-17=-12, 3-12=-12, 10-11=-12
   Horz: 1-2=-17, 2-4=-23, 9-10=-17
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 16=134(B) 13=-10(B) 6=23(B) 22=7(B) 23=5(B) 24=5(B) 25=5(B) 26=5(B) 27=23(B) 28=23(B) 29=23(B) 30=23(B) 31=22(B) 32=22(B) 33=22(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)
6) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-29, 2-4=-35, 4-9=9, 2-17=-20, 3-12=-20, 10-11=-20
   Horz: 1-2=9, 2-4=15, 9-10=10
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 16=146(B) 13=-2(B) 6=43(B) 22=29(B) 23=25(B) 24=25(B) 25=25(B) 26=25(B) 27=43(B) 28=43(B) 29=43(B) 30=43(B) 31=42(B) 32=42(B) 33=42(B) 34=29(B) 35=29(B) 36=29(B) 37=29(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)
7) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=-3, 2-4=-9, 4-9=9, 2-17=-20, 3-12=-20, 10-11=-20
   Horz: 1-2=-17, 2-4=-11, 9-10=-28
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 16=146(B) 13=-2(B) 6=43(B) 22=26(B) 23=25(B) 24=25(B) 25=25(B) 26=25(B) 27=43(B) 28=43(B) 29=43(B) 30=43(B) 31=42(B) 32=42(B) 33=42(B) 34=29(B) 35=29(B) 36=29(B) 37=29(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)
8) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
   Uniform Loads (plf)
   Vert: 1-2=23, 2-4=29, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
   Horz: 1-2=-35, 2-4=-41, 9-10=20
   Drag: 4-5=-0
   Concentrated Loads (lb)
   Vert: 16=134(B) 13=-10(B) 6=41(B) 22=21(B) 23=22(B) 24=22(B) 25=22(B) 26=22(B) 27=41(B) 28=41(B) 29=41(B) 30=41(B) 31=40(B) 32=40(B) 33=40(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)
9) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60

Continued on page 3

LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=5, 2-4=11, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-17, 2-4=-23, 9-10=-14
Drag: 4-5=-0

Concentrated Loads (lb)
Vert: 16=134(B) 13=-10(B) 6=41(B) 22=22(B) 23=22(B) 24=22(B) 25=22(B) 26=22(B) 27=41(B) 28=41(B) 29=41(B) 30=41(B) 31=40(B) 32=40(B) 33=40(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)

10) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=23, 2-4=29, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-35, 2-4=-41, 9-10=20
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=134(B) 13=-10(B) 6=41(B) 22=21(B) 23=22(B) 24=22(B) 25=22(B) 26=22(B) 27=41(B) 28=41(B) 29=41(B) 30=41(B) 31=40(B) 32=40(B) 33=40(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)

11) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-4=11, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-17, 2-4=-23, 9-10=-14
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=134(B) 13=-10(B) 6=41(B) 22=22(B) 23=22(B) 24=22(B) 25=22(B) 26=22(B) 27=41(B) 28=41(B) 29=41(B) 30=41(B) 31=40(B) 32=40(B) 33=40(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)

12) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=15, 2-4=9, 4-9=-9, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-35, 2-4=-29, 9-10=8
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=146(B) 13=-2(B) 6=61(B) 22=40(B) 23=42(B) 24=42(B) 25=42(B) 26=42(B) 27=61(B) 28=61(B) 29=61(B) 30=61(B) 31=59(B) 32=59(B) 33=59(B) 34=29(B) 35=29(B) 36=29(B) 37=29(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)

13) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-4=-9, 4-9=-9, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-17, 2-4=-11, 9-10=-26
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=146(B) 13=-2(B) 6=61(B) 22=42(B) 23=42(B) 24=42(B) 25=42(B) 26=42(B) 27=61(B) 28=61(B) 29=61(B) 30=61(B) 31=59(B) 32=59(B) 33=59(B) 34=29(B) 35=29(B) 36=29(B) 37=29(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)

14) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-4=-20, 4-9=-20, 2-17=-20, 3-12=-20, 10-11=-20
Concentrated Loads (lb)
Vert: 16=-72(B) 13=-16(B) 6=-15(B) 22=-17(B) 23=-17(B) 24=-17(B) 25=-17(B) 26=-17(B) 27=-15(B) 28=-15(B) 29=-15(B) 30=-15(B) 31=-15(B) 32=-15(B) 33=-15(B) 34=-15(B) 35=-15(B) 36=-15(B) 37=-15(B) 38=-100(F) 39=-16(B) 40=-16(B) 41=-16(B) 42=-16(B) 43=-17(B) 44=-17(B) 45=-17(B)

15) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-64, 2-4=-69, 4-9=-36, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=7, 2-4=11, 9-10=7
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=102(B) 13=-2(B) 6=32(B) 22=21(B) 23=18(B) 24=18(B) 25=18(B) 26=18(B) 27=32(B) 28=32(B) 29=32(B) 30=32(B) 31=31(B) 32=31(B) 33=31(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)

16) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-45, 2-4=-49, 4-9=-36, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-13, 2-4=-9, 9-10=-21
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=102(B) 13=-2(B) 6=32(B) 22=19(B) 23=18(B) 24=18(B) 25=18(B) 26=18(B) 27=32(B) 28=32(B) 29=32(B) 30=32(B) 31=31(B) 32=31(B) 33=31(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)

17) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-4=-36, 4-9=-49, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-26, 2-4=-22, 9-10=6
Concentrated Loads (lb)
Vert: 16=102(B) 13=-2(B) 6=45(B) 22=30(B) 23=31(B) 24=31(B) 25=31(B) 26=31(B) 27=45(B) 28=45(B) 29=45(B) 30=45(B) 31=44(B) 32=44(B) 33=44(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)

18) Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-45, 2-4=-49, 4-9=-49, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-13, 2-4=-9, 9-10=-19

Continued on page 4

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 16=102(B) 13=-2(B) 6=45(B) 22=31(B) 23=31(B) 24=31(B) 25=31(B) 26=31(B) 27=45(B) 28=45(B) 29=45(B) 30=45(B) 31=44(B) 32=44(B) 33=44(B) 34=21(B) 35=21(B) 36=21(B) 37=21(B) 38=-100(F) 39=-2(B) 40=-2(B) 41=-2(B) 42=-2(B) 43=-2(B) 44=-2(B) 45=-2(B)

19) Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-4=-16, 4-9=-12, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 2-4=4
Concentrated Loads (lb)
Vert: 16=108(B) 13=-10(B) 6=48(B) 22=34(B) 23=34(B) 24=34(B) 25=34(B) 26=34(B) 27=48(B) 28=48(B) 29=48(B) 30=48(B) 31=47(B) 32=47(B) 33=47(B) 34=14(B) 35=14(B) 36=14(B) 37=14(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)

20) Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 4-9=-12, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 9-10=-16
Concentrated Loads (lb)
Vert: 16=108(B) 13=-10(B) 6=48(B) 22=34(B) 23=34(B) 24=34(B) 25=34(B) 26=34(B) 27=48(B) 28=48(B) 29=48(B) 30=48(B) 31=47(B) 32=47(B) 33=47(B) 34=14(B) 35=14(B) 36=14(B) 37=14(B) 38=-100(F) 39=-10(B) 40=-10(B) 41=-10(B) 42=-10(B) 43=-10(B) 44=-10(B) 45=-10(B)

21) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-4=-15, 4-9=29, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-11, 2-4=3, 9-10=22
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-148(B) 13=-32(B) 6=-99(B) 22=-87(B) 23=-91(B) 24=-91(B) 25=-91(B) 26=-91(B) 27=-99(B) 28=-99(B) 29=-99(B) 30=-99(B) 31=-98(B) 32=-98(B) 33=-98(B) 34=-39(B) 35=-39(B) 36=-39(B) 37=-39(B) 38=-100(F) 39=-32(B) 40=-32(B) 41=-32(B) 42=-32(B) 43=-32(B) 44=-32(B) 45=-32(B)

22) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-4=11, 4-9=29, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-17, 2-4=-23, 9-10=-17
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-148(B) 13=-32(B) 6=-99(B) 22=-90(B) 23=-91(B) 24=-91(B) 25=-91(B) 26=-91(B) 27=-99(B) 28=-99(B) 29=-99(B) 30=-99(B) 31=-98(B) 32=-98(B) 33=-98(B) 34=-39(B) 35=-39(B) 36=-39(B) 37=-39(B) 38=-100(F) 39=-32(B) 40=-32(B) 41=-32(B) 42=-32(B) 43=-32(B) 44=-32(B) 45=-32(B)

23) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-29, 2-4=-35, 4-9=9, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=9, 2-4=15, 9-10=10
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-136(B) 13=-24(B) 6=-79(B) 22=-67(B) 23=-72(B) 24=-72(B) 25=-72(B) 26=-72(B) 27=-79(B) 28=-79(B) 29=-79(B) 30=-79(B) 31=-78(B) 32=-78(B) 33=-78(B) 34=-31(B) 35=-31(B) 36=-31(B) 37=-31(B) 38=-100(F) 39=-24(B) 40=-24(B) 41=-24(B) 42=-24(B) 43=-24(B) 44=-24(B) 45=-24(B)

24) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-4=-9, 4-9=9, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-17, 2-4=-11, 9-10=-28
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-136(B) 13=-24(B) 6=-79(B) 22=-70(B) 23=-72(B) 24=-72(B) 25=-72(B) 26=-72(B) 27=-79(B) 28=-79(B) 29=-79(B) 30=-79(B) 31=-78(B) 32=-78(B) 33=-78(B) 34=-31(B) 35=-31(B) 36=-31(B) 37=-31(B) 38=-100(F) 39=-24(B) 40=-24(B) 41=-24(B) 42=-24(B) 43=-24(B) 44=-24(B) 45=-24(B)

25) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=23, 2-4=29, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-35, 2-4=-41, 9-10=20
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-148(B) 13=-32(B) 6=-81(B) 22=-76(B) 23=-74(B) 24=-74(B) 25=-74(B) 26=-74(B) 27=-81(B) 28=-81(B) 29=-81(B) 30=-81(B) 31=-80(B) 32=-80(B) 33=-80(B) 34=-39(B) 35=-39(B) 36=-39(B) 37=-39(B) 38=-100(F) 39=-32(B) 40=-32(B) 41=-32(B) 42=-32(B) 43=-32(B) 44=-32(B) 45=-32(B)

26) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-4=11, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-17, 2-4=-23, 9-10=-14
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-148(B) 13=-32(B) 6=-81(B) 22=-74(B) 23=-74(B) 24=-74(B) 25=-74(B) 26=-74(B) 27=-81(B) 28=-81(B) 29=-81(B) 30=-81(B) 31=-80(B) 32=-80(B) 33=-80(B) 34=-39(B) 35=-39(B) 36=-39(B) 37=-39(B) 38=-100(F) 39=-32(B) 40=-32(B) 41=-32(B) 42=-32(B) 43=-32(B) 44=-32(B) 45=-32(B)

27) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=23, 2-4=29, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-35, 2-4=-41, 9-10=20
Drag: 4-5=-0

Continued on page 5

LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 16=-148(B) 13=-32(B) 6=-81(B) 22=-76(B) 23=-74(B) 24=-74(B) 25=-74(B) 26=-74(B) 27=-81(B) 28=-81(B) 29=-81(B) 30=-81(B) 31=-80(B) 32=-80(B) 33=-80(B) 34=-39(B) 35=-39(B) 36=-39(B) 37=-39(B) 38=-100(F) 39=-32(B) 40=-32(B) 41=-32(B) 42=-32(B) 43=-32(B) 44=-32(B) 45=-32(B)

28) Reversal: Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=5, 2-4=11, 4-9=11, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 1-2=-17, 2-4=-23, 9-10=-14
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-148(B) 13=-32(B) 6=-81(B) 22=-74(B) 23=-74(B) 24=-74(B) 25=-74(B) 26=-74(B) 27=-81(B) 28=-81(B) 29=-81(B) 30=-81(B) 31=-80(B) 32=-80(B) 33=-80(B) 34=-39(B) 35=-39(B) 36=-39(B) 37=-39(B) 38=-100(F) 39=-32(B) 40=-32(B) 41=-32(B) 42=-32(B) 43=-32(B) 44=-32(B) 45=-32(B)

29) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=15, 2-4=9, 4-9=-9, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-35, 2-4=-29, 9-10=8
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-136(B) 13=-24(B) 6=-62(B) 22=-56(B) 23=-54(B) 24=-54(B) 25=-54(B) 26=-54(B) 27=-62(B) 28=-62(B) 29=-62(B) 30=-62(B) 31=-61(B) 32=-61(B) 33=-61(B) 34=-31(B) 35=-31(B) 36=-31(B) 37=-31(B) 38=-100(F) 39=-24(B) 40=-24(B) 41=-24(B) 42=-24(B) 43=-24(B) 44=-24(B) 45=-24(B)

30) Reversal: Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-3, 2-4=-9, 4-9=-9, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-17, 2-4=-11, 9-10=-26
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-136(B) 13=-24(B) 6=-62(B) 22=-54(B) 23=-54(B) 24=-54(B) 25=-54(B) 26=-54(B) 27=-62(B) 28=-62(B) 29=-62(B) 30=-62(B) 31=-61(B) 32=-61(B) 33=-61(B) 34=-31(B) 35=-31(B) 36=-31(B) 37=-31(B) 38=-100(F) 39=-24(B) 40=-24(B) 41=-24(B) 42=-24(B) 43=-24(B) 44=-24(B) 45=-24(B)

31) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-64, 2-4=-69, 4-9=-36, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=7, 2-4=11, 9-10=7
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-191(B) 13=-26(B) 6=-70(B) 22=-55(B) 23=-58(B) 24=-58(B) 25=-58(B) 26=-58(B) 27=-70(B) 28=-70(B) 29=-70(B) 30=-70(B) 31=-69(B) 32=-69(B) 33=-69(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-41(B) 38=-100(F) 39=-26(B) 40=-26(B) 41=-26(B) 42=-26(B) 43=-27(B) 44=-27(B) 45=-27(B)

32) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-45, 2-4=-49, 4-9=-36, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-13, 2-4=-9, 9-10=-21
Drag: 4-5=-0
Concentrated Loads (lb)
Vert: 16=-191(B) 13=-26(B) 6=-70(B) 22=-56(B) 23=-58(B) 24=-58(B) 25=-58(B) 26=-58(B) 27=-70(B) 28=-70(B) 29=-70(B) 30=-70(B) 31=-69(B) 32=-69(B) 33=-69(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-41(B) 38=-100(F) 39=-26(B) 40=-26(B) 41=-26(B) 42=-26(B) 43=-27(B) 44=-27(B) 45=-27(B)

33) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-4=-36, 4-9=-49, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-26, 2-4=-22, 9-10=6
Concentrated Loads (lb)
Vert: 16=-191(B) 13=-26(B) 6=-57(B) 22=-46(B) 23=-45(B) 24=-45(B) 25=-45(B) 26=-45(B) 27=-57(B) 28=-57(B) 29=-57(B) 30=-57(B) 31=-56(B) 32=-56(B) 33=-56(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-41(B) 38=-100(F) 39=-26(B) 40=-26(B) 41=-26(B) 42=-26(B) 43=-27(B) 44=-27(B) 45=-27(B)

34) Reversal: Dead + 0.75 Roof Live (bal.) + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-45, 2-4=-49, 4-9=-49, 2-17=-20, 3-12=-20, 10-11=-20
Horz: 1-2=-13, 2-4=-9, 9-10=-19
Concentrated Loads (lb)
Vert: 16=-191(B) 13=-26(B) 6=-57(B) 22=-45(B) 23=-45(B) 24=-45(B) 25=-45(B) 26=-45(B) 27=-57(B) 28=-57(B) 29=-57(B) 30=-57(B) 31=-56(B) 32=-56(B) 33=-56(B) 34=-41(B) 35=-41(B) 36=-41(B) 37=-41(B) 38=-100(F) 39=-26(B) 40=-26(B) 41=-26(B) 42=-26(B) 43=-27(B) 44=-27(B) 45=-27(B)

35) Reversal: Dead + 0.6 MWFRS Wind Min. Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-12, 2-4=-16, 4-9=-12, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 2-4=4
Concentrated Loads (lb)
Vert: 16=-121(B) 13=-29(B) 6=-43(B) 22=-38(B) 23=-39(B) 24=-39(B) 25=-39(B) 26=-39(B) 27=-43(B) 28=-43(B) 29=-43(B) 30=-43(B) 31=-42(B) 32=-42(B) 33=-42(B) 34=-32(B) 35=-32(B) 36=-32(B) 37=-32(B) 38=-100(F) 39=-29(B) 40=-29(B) 41=-29(B) 42=-29(B) 43=-29(B) 44=-29(B) 45=-29(B)

36) Reversal: Dead + 0.6 MWFRS Wind Min. Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-4=-12, 4-9=-12, 2-17=-12, 3-12=-12, 10-11=-12
Horz: 9-10=-16

Continued on page 6

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 16=-121(B) 13=-29(B) 6=-43(B) 22=-39(B) 23=-39(B) 24=-39(B) 25=-39(B) 26=-39(B) 27=-43(B) 28=-43(B) 29=-43(B) 30=-43(B) 31=-42(B) 32=-42(B) 33=-42(B) 34=-32(B) 35=-32(B) 36=-32(B) 37=-32(B) 38=-100(F) 39=-29(B) 40=-29(B) 41=-29(B) 42=-29(B) 43=-29(B) 44=-29(B) 45=-29(B)

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	E1	GABLE	1	1	I45767997
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:31 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-SQby8ASd1ztdOBVAlPObE8IPDkNbWNx5oIrWNYzORok

-0-10-8	3-3-8	5-9-0	8-2-8	11-6-0	12-4-8
0-10-8	3-3-8	2-5-8	2-5-8	3-3-8	0-10-8

Scale = 1:30.7

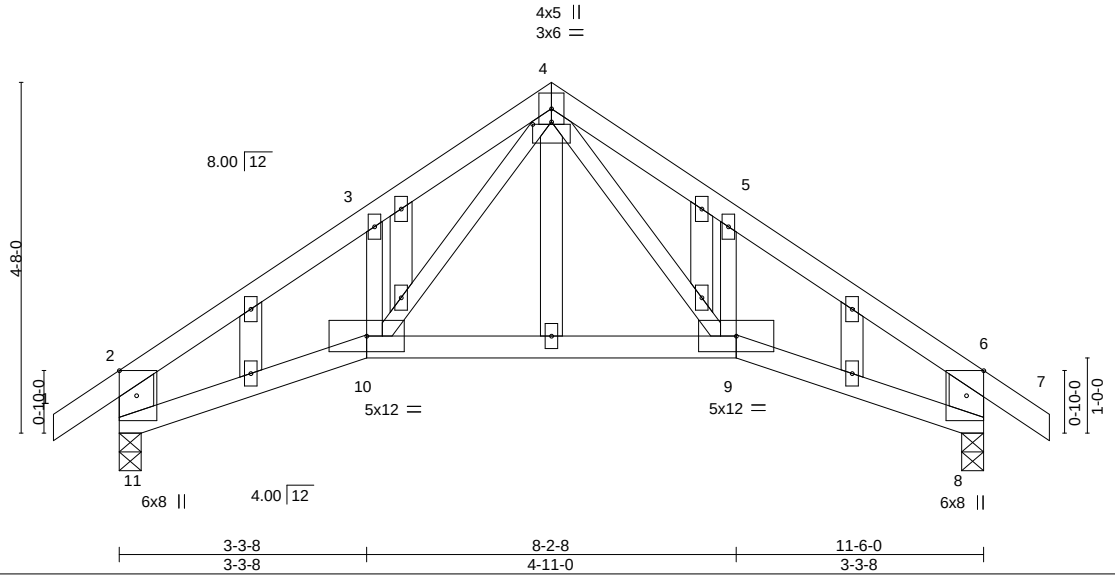


Plate Offsets (X,Y)-- [4:0-3-0,0-0-6], [8:0-4-0,Edge], [11:0-4-0,Edge]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.06	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.14	9-10	>958	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	9-10	>999	240	Weight: 52 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 2-11,6-8: 2x6 SPF No.2
OTHERS	2x4 SPF No.2

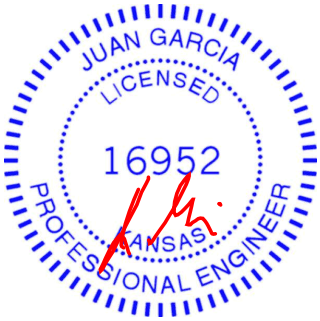
BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-4-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=0-3-8, 8=0-3-8
Max Horz 11=-141(LC 6)
Max Uplift 11=-80(LC 8), 8=-80(LC 9)
Max Grav 11=574(LC 1), 8=574(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-804/94, 3-4=-682/196, 4-5=-682/166, 5-6=-804/64, 2-11=-681/118, 6-8=-681/94
BOT CHORD 10-11=-73/643, 9-10=0/406, 8-9=0/588
WEBS 4-9=-125/322, 4-10=-142/355

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 11, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 22,2021

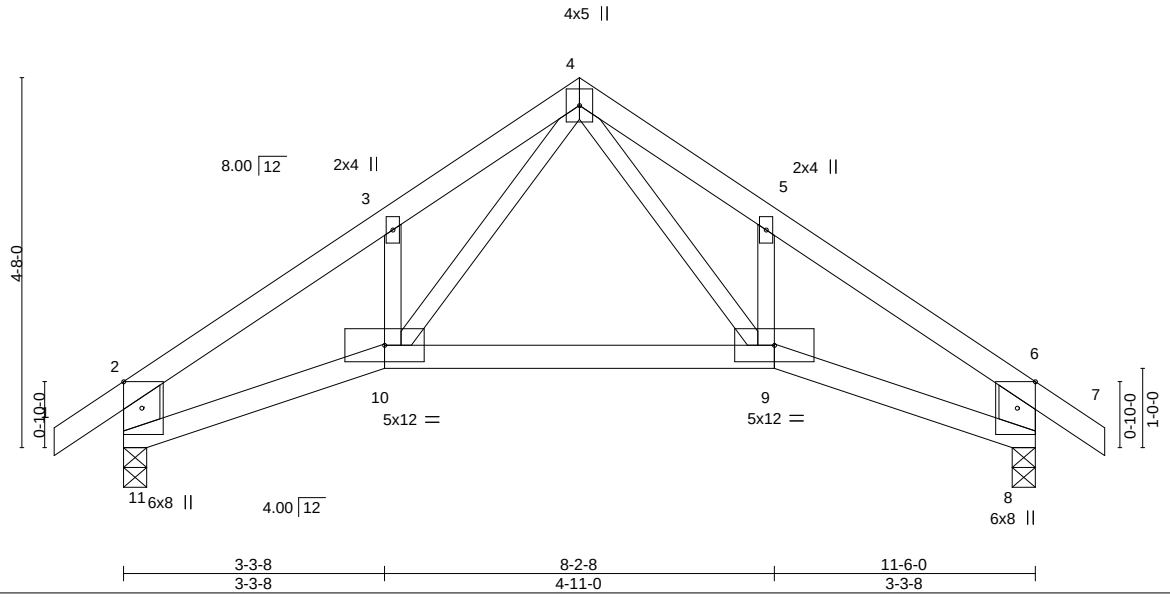
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	E2	Roof Special	1	1	I45767998
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:32 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-wc9KMWTFoG?U?L4NJ7vqnLqaz8jqFqBF0yb4w_zORoj

-0-10-8 | 3-3-8 | 5-9-0 | 8-2-8 | 11-6-0 | 12-4-8
0-10-8 | 3-3-8 | 2-5-8 | 2-5-8 | 3-3-8 | 0-10-8

Scale = 1:29.1



3-3-8 | 8-2-8 | 11-6-0
3-3-8 | 4-11-0 | 3-3-8

Plate Offsets (X,Y)-- [8:0-4-0,Edge], [11:0-4-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.06	9-10	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.42	Vert(CT)	-0.14	9-10	>958	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	9-10	>999	240	Weight: 43 lb	FT = 10%

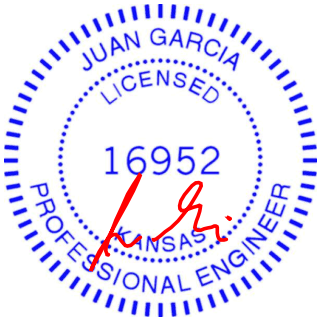
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-11,6-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-4-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 11=0-3-8, 8=0-3-8
Max Horz 11=-141(LC 6)
Max Uplift 11=-80(LC 8), 8=-80(LC 9)
Max Grav 11=574(LC 1), 8=574(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-804/94, 3-4=-682/196, 4-5=-682/166, 5-6=-804/64, 2-11=-681/118, 6-8=-681/94
BOT CHORD 10-11=-73/643, 9-10=0/406, 8-9=0/588
WEBS 4-9=-125/322, 4-10=-142/355

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 11, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 8.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	E3	Roof Special	2	1	I45767999
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:33 2021 Page 1
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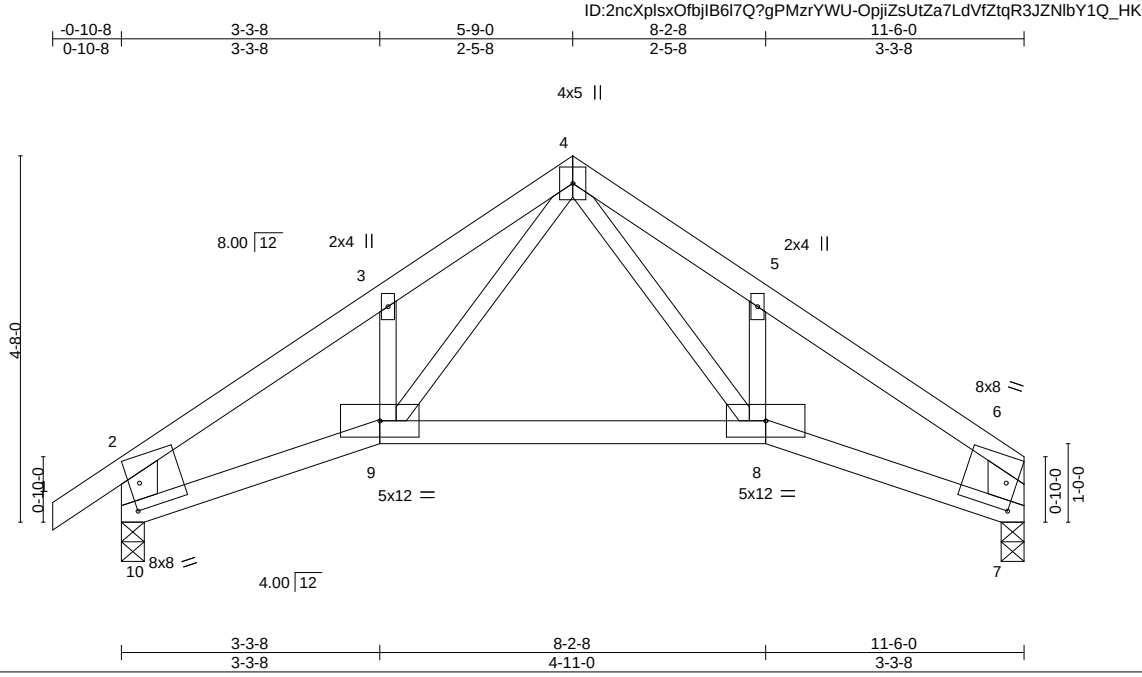

Plate Offsets (X,Y)-- [6:0-1-9,0-4-0], [10:0-1-9,0-4-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.07	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.52	Vert(CT)	-0.16	8-9	>848	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.08	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.04	8-9	>999	240	Weight: 42 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-10,6-7: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 10=0-3-8, 7=0-3-8
Max Horz 10=135(LC 5)
Max Uplift 10=-80(LC 8), 7=-54(LC 9)
Max Grav 10=578(LC 1), 7=493(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-813/103, 3-4=-690/203, 4-5=-702/184, 5-6=-804/76, 2-10=-688/124, 6-7=-584/78
BOT CHORD 9-10=-93/633, 8-9=-5/397, 7-8=-29/595
WEBS 4-8=-136/339, 4-9=-147/356

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Bearing at joint(s) 10, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10, 7.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	E4	Half Hip	1	1	I45768000
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:34 2021 Page 1
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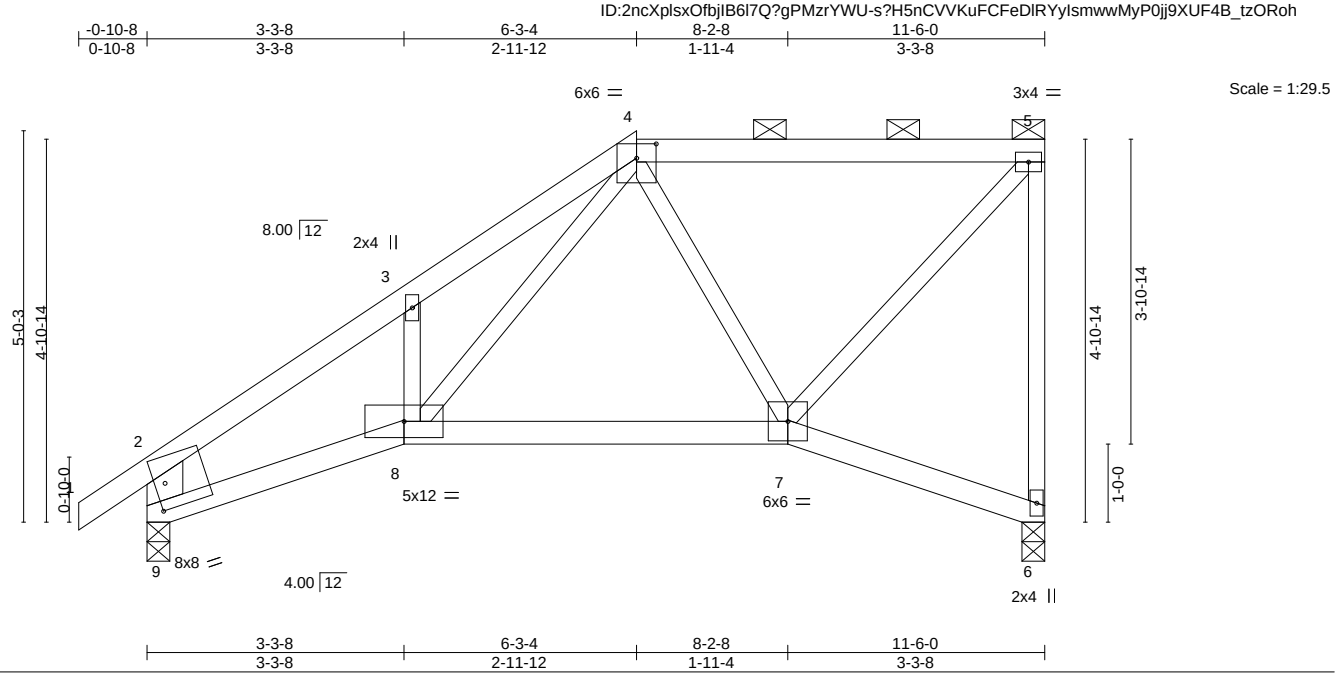

Plate Offsets (X,Y)-- [4:0-3-0,0-2-3], [9:0-1-9,0-4-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.04	7-8	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.10	7-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	8	>999	240	Weight: 46 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
2-9: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 9=0-3-8
Max Horz 9=196(LC 7)
Max Uplift 6=-103(LC 5), 9=-80(LC 8)
Max Grav 6=499(LC 1), 9=584(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-821/115, 3-4=-703/222, 4-5=-280/65, 5-6=-475/125, 2-9=-690/131
BOT CHORD 8-9=-216/625, 7-8=-150/389
WEBS 4-8=-168/387, 5-7=-78/409

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 6, 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 6=103.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	E5	Half Hip Girder	1	2	I45768001
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:35 2021 Page 1
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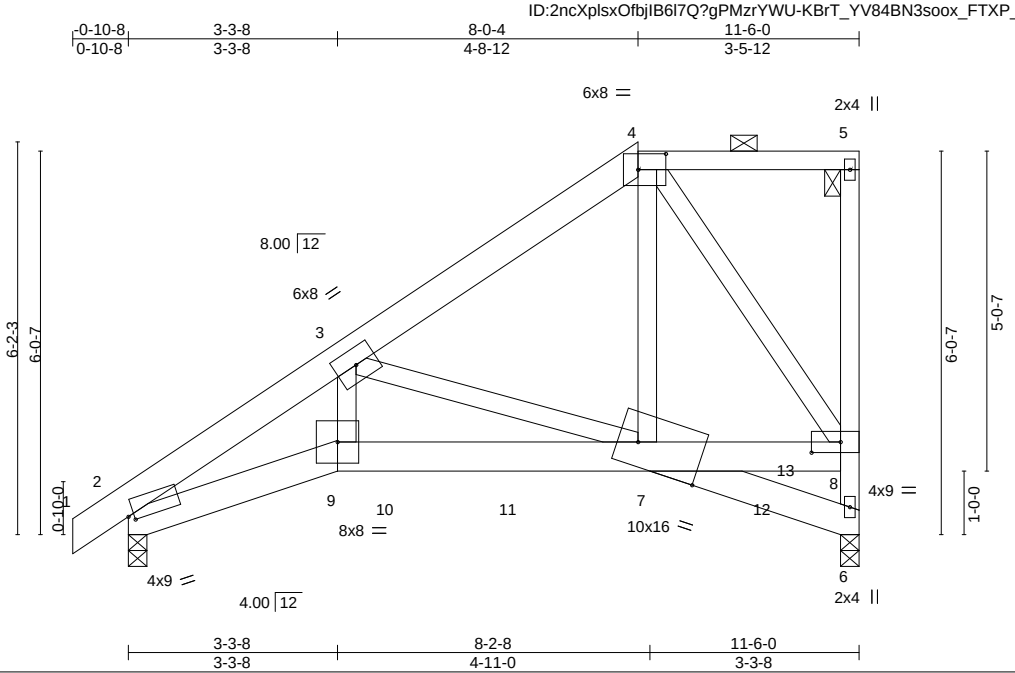

Plate Offsets (X,Y)-- [2:0-1-2,0-0-15], [4:0-5-4,0-3-0], [7:1-0-4,Edge], [8:0-5-8,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.82	Vert(LL)	-0.09	7-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(CT)	-0.16	7-9	>856	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.07	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.06	7-9	>999	240	Weight: 164 lb	FT = 10%

LUMBER-
TOP CHORD 2x6 SPF No.2 *Except* 4-5: 2x4 SPF No.2
BOT CHORD 2x6 SP 2400F 2.0E
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-5-15 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=187(LC 26)
Max Uplift 6=-314(LC 5), 2=-324(LC 8)
Max Grav 6=4066(LC 1), 2=3021(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-7649/887, 3-4=-2891/249, 6-8=-4113/337
BOT CHORD 2-9=-850/6193, 7-9=-748/5477, 7-8=-294/2450
WEBS 3-9=-566/4113, 3-7=-3269/545, 4-7=-392/4727, 4-8=-4299/387

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-7-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Bearing at joint(s) 6, 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 6=314, 2=324.
10) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1894 lb down and 383 lb up at 4-0-13, 1369 lb down and 91 lb up at 6-0-0, and 1436 lb down and 93 lb up at 8-2-0, and 1431 lb down and 42 lb up at 10-0-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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LOAD CASE(S) Standard

Continued on page 2

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-4=-70, 4-5=-70, 2-9=-20, 7-9=-20, 6-7=-20
   Concentrated Loads (lb)
   Vert: 7=-1373(B) 10=-1894(B) 11=-1369(B) 12=-1369(B)

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	G1	Common Supported Gable	1	1	I45768002

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:36 2021 Page 1

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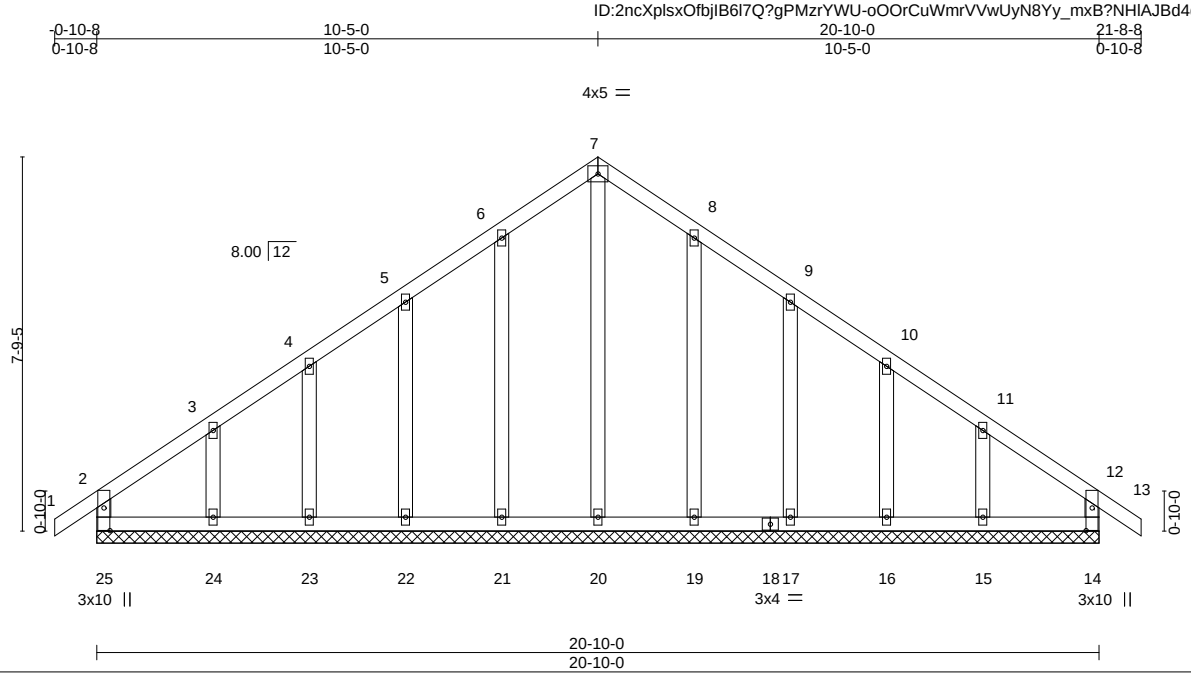

Plate Offsets (X,Y)-- [14:0-5-10,0-1-8], [25:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	13	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 100 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 20-10-0.

(lb) - Max Horz 25=220(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 25, 14, 21, 22, 23, 19, 17, 16 except 24=-126(LC 8), 15=-118(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 25, 14, 20, 21, 22, 23, 24, 19, 17, 16, 15

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 25, 14, 21, 22, 23, 19, 17, 16 except (jt=lb) 24=126, 15=118.
11) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	G2	GABLE	1	1	I45768003
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:38 2021 Page 1
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-0-10-8 8-7-5 16-0-0 23-4-11 32-0-0 32-10-8
0-10-8 8-7-5 7-4-10 7-4-11 8-7-6 0-10-8

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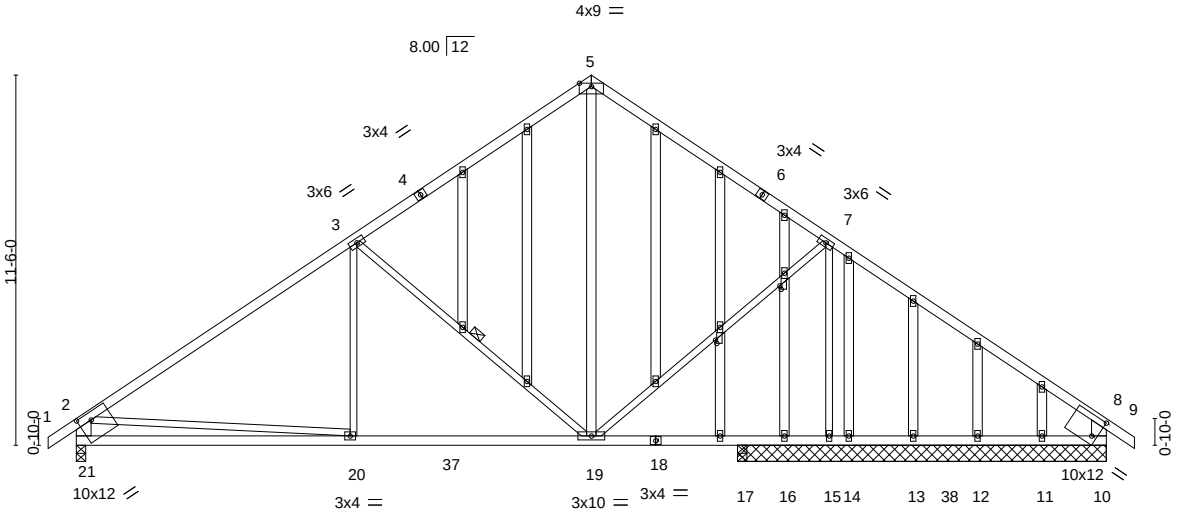

8-7-5 16-0-0 20-10-0 23-4-11 32-0-0
8-7-5 7-4-10 4-10-0 2-6-11 8-7-6

Plate Offsets (X,Y)-- [10:0-1-14,0-7-1], [21:0-4-12,0-2-12], [30:0-1-4,0-0-8], [32:0-1-4,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.11	20-21	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.24	20-21	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	1.00	Horz(CT)	0.03	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.03	20	>999	240	Weight: 187 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2 *Except* 5-19: 2x4 SPF No.2, 2-21,8-10: 2x6 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-9-1 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-10-1 oc bracing: 20-21.
WEBS	1 Row at midpt 3-19

REACTIONS. All bearings 11-5-8 except (jt=length) 21=0-3-8, 17=0-3-8.
(lb) - Max Horz 21=319(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 15, 16, 11 except 21=-188(LC 8), 10=-203(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 16, 14, 13, 12, 11, 17 except 21=1238(LC 15), 15=1118(LC 15), 10=487(LC 22)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	2-3=-1451/233, 3-5=-862/321, 5-7=-828/286, 7-8=-505/314, 2-21=-1107/235, 8-10=-554/299
BOT CHORD	20-21=-434/933, 19-20=-213/1277, 17-19=-112/290, 16-17=-112/290, 15-16=-112/290, 14-15=-112/290, 13-14=-112/290, 12-13=-112/290, 11-12=-112/290, 10-11=-112/290
WEBS	5-19=-184/409, 7-19=-69/592, 7-15=-1061/105, 3-19=-812/277, 3-20=0/370, 2-20=-39/570

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 16, 11 except (jt=lb) 21=188, 10=203.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT	
210402	G3	Common	6	1	Job Reference (optional)	I45768004

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:40 2021 Page 1
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0-10-8 8-7-5 7-4-10 7-4-11 8-7-6 0-10-8

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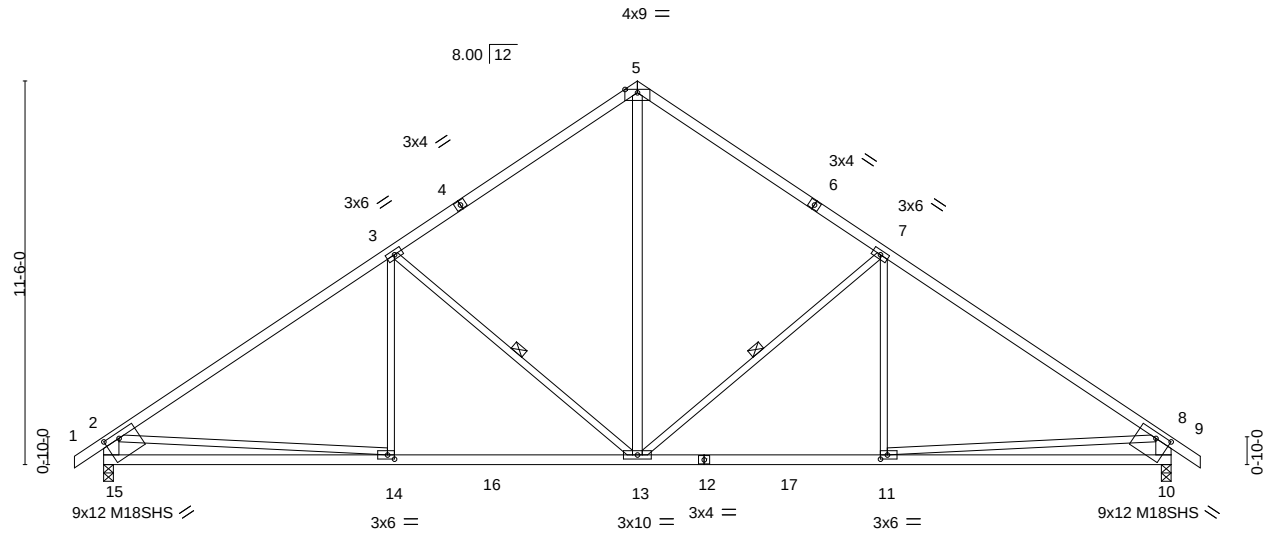


8-7-5 16-0-0 23-4-11 32-0-0
8-7-5 7-4-10 7-4-11 8-7-6

Plate Offsets (X,Y)-- [10:0-5-4,0-2-0], [11:0-2-8,0-1-8], [14:0-2-8,0-1-8], [15:0-5-4,0-2-0]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.12	11-13	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.26	10-11	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.64	Horz(CT)	0.06	10	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	13	>999	240	Weight: 135 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
5-13: 2x4 SPF No.2, 2-15,8-10: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-10-1 oc bracing: 14-15.
WEBS 1 Row at midpt 7-13, 3-13

REACTIONS. (size) 15=0-3-8, 10=0-3-8
Max Horz 15=319(LC 7)
Max Uplift 15=-186(LC 8), 10=-186(LC 9)
Max Grav 15=1632(LC 15), 10=1632(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2068/225, 3-5=-1487/283, 5-7=-1487/283, 7-8=-2069/225, 2-15=-1496/234, 8-10=-1495/234
BOT CHORD 14-15=-433/988, 13-14=-212/1799, 11-13=-51/1619, 10-11=-268/764
WEBS 5-13=-141/1096, 7-13=-762/277, 7-11=0/331, 3-13=-763/278, 3-14=0/331, 2-14=0/1005, 8-11=0/1020

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=186, 10=186.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

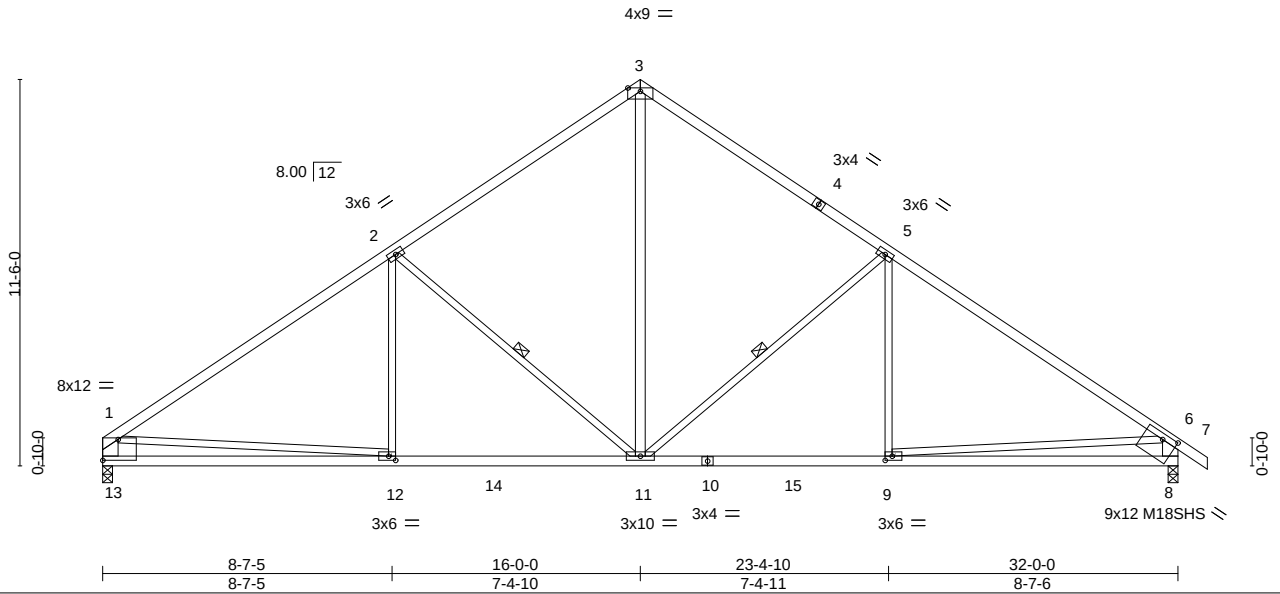
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	G4	Common	4	1	I45768005
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:44 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-ZwtstdcnzyVnRB_g0e7eGtKar_kh36Z0npViLIzORoX

8-7-5	16-0-0	23-4-10	32-0-0	32-10-8
8-7-5	7-4-10	7-4-11	8-7-6	0-10-8

Scale = 1:68.6



8-7-5	16-0-0	23-4-10	32-0-0
8-7-5	7-4-10	7-4-11	8-7-6

Plate Offsets (X,Y)-- [1:Edge,0-7-7], [8:0-5-4,0-2-0], [9:0-2-8,0-1-8], [12:0-2-8,0-1-8]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.12	8-9	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.26	8-9	>999	240	M18SHS	197/144
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S		Wind(LL)	0.05	11-12	>999	240	Weight: 134 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2 *Except*
1-3: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2 *Except*
3-11: 2x4 SPF No.2, 1-13,6-8: 2x6 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-11, 2-11

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Horz 13=-313(LC 4)
Max Uplift 13=-161(LC 8), 8=-186(LC 9)
Max Grav 13=1560(LC 15), 8=1632(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2067/222, 2-3=-1491/284, 3-5=-1489/283, 5-6=-2070/225, 1-13=-1423/208, 6-8=-1496/234
BOT CHORD 12-13=-290/782, 11-12=-217/1811, 9-11=-51/1621, 8-9=-268/764
WEBS 3-11=-146/1106, 5-11=-762/277, 5-9=0/331, 2-11=-777/285, 2-12=0/326, 1-12=-16/1147, 6-9=0/1023

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are MT20 plates unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=161, 8=186.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J1	Diagonal Hip Girder	2	1	I45768006

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:45 2021 Page 1
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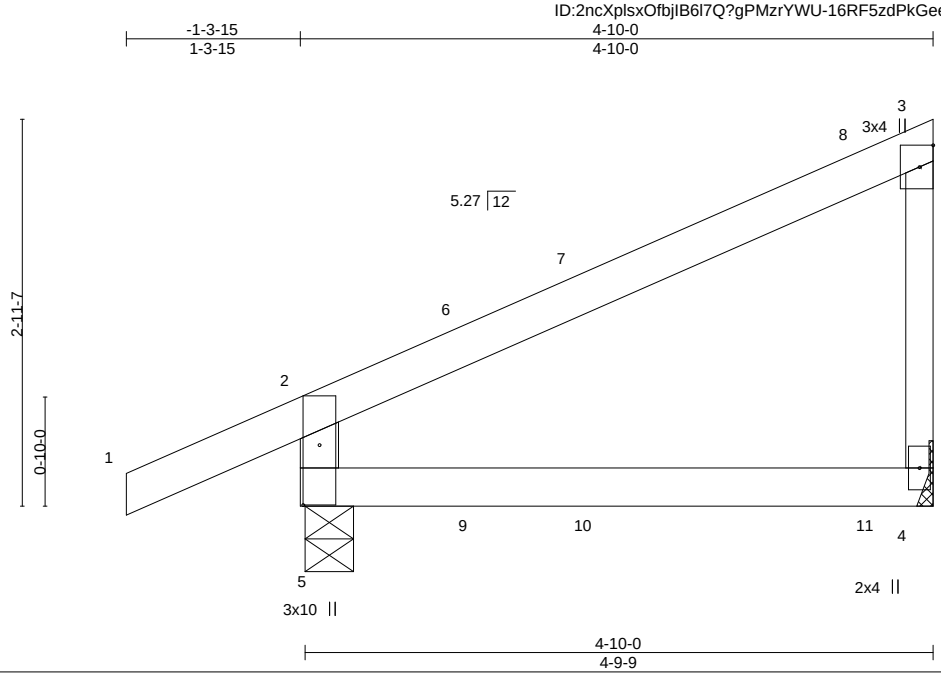

Plate Offsets (X,Y)-- [5:0-5-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.04	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-4: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-7, 4=Mechanical
Max Horz 5=123(LC 5)
Max Uplift 5=-74(LC 8), 4=-81(LC 5)
Max Grav 5=324(LC 1), 4=233(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-290/102

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 77 lb down and 17 lb up at 1-4-8, and 74 lb down and 31 lb up at 2-3-2, and 88 lb down and 70 lb up at 4-4-15 on top chord, and 6 lb down and 8 lb up at 1-4-8, and 7 lb down and 10 lb up at 2-3-2, and 27 lb down at 4-4-15 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 8=-32(F) 9=5(F) 10=3(B) 11=-18(F)

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J2	Jack-Open	2	1	I45768007

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:53 2021 Page 1
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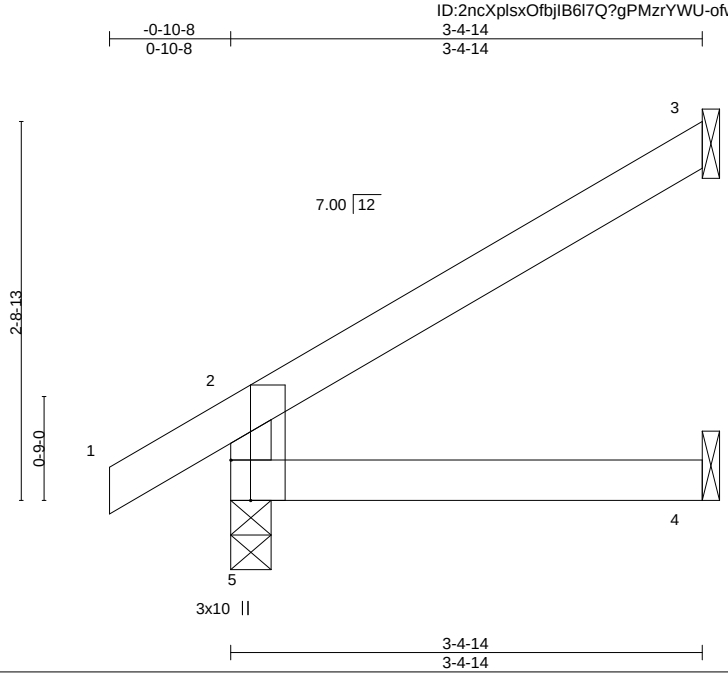

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 10 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-4-14 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=90(LC 8)
Max Uplift 5=-19(LC 8), 3=-63(LC 8)
Max Grav 5=227(LC 1), 3=102(LC 15), 4=60(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J3	Jack-Open	7	1	I45768008
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:54 2021 Page 1

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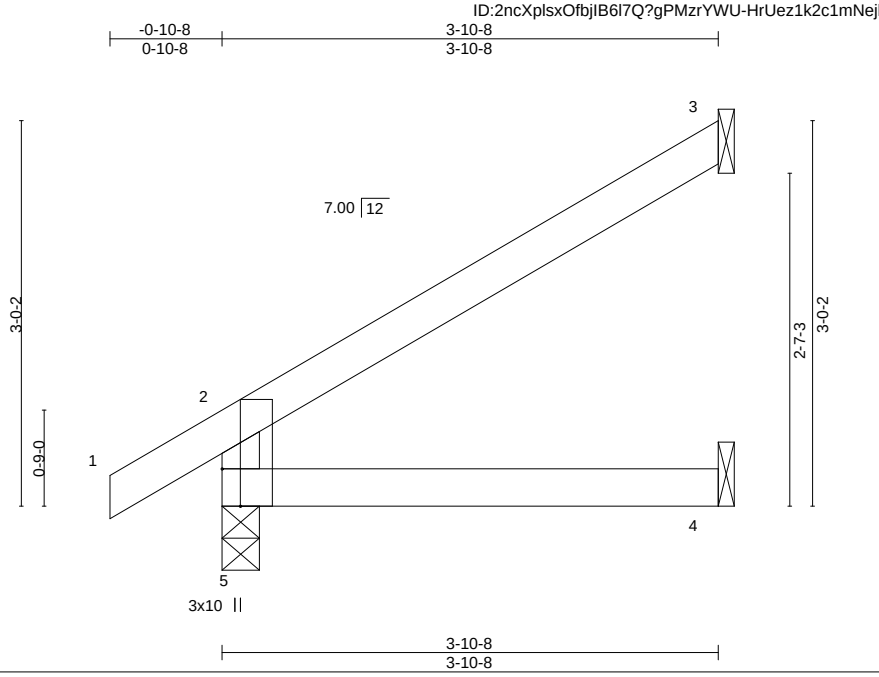

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 11 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 3-10-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=101(LC 8)
Max Uplift 5=-19(LC 8), 3=-72(LC 8)
Max Grav 5=246(LC 1), 3=118(LC 15), 4=69(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J4	Jack-Open	2	1	I45768009

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:54 2021 Page 1

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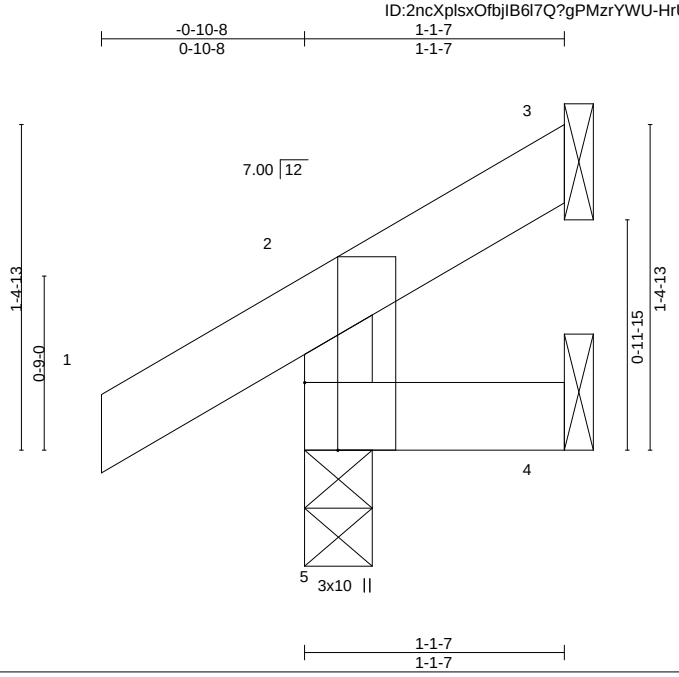

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 4 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-1-7 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=36(LC 8)
Max Uplift 5=-22(LC 8), 3=-16(LC 8), 4=-2(LC 5)
Max Grav 5=153(LC 1), 3=12(LC 15), 4=15(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J5	Jack-Open	3	1	I45768010

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:55 2021 Page 1

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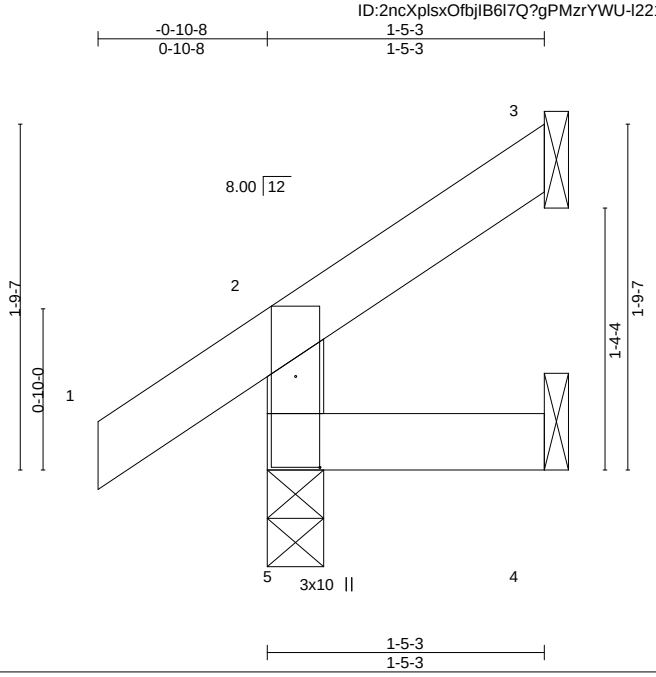

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	240	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	5	>999	180		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 5 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-5-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=50(LC 8)
Max Uplift 5=-12(LC 8), 3=-29(LC 8), 4=-4(LC 8)
Max Grav 5=157(LC 1), 3=30(LC 15), 4=22(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J6	Diagonal Hip Girder	1	1	I45768011

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:57 2021 Page 1
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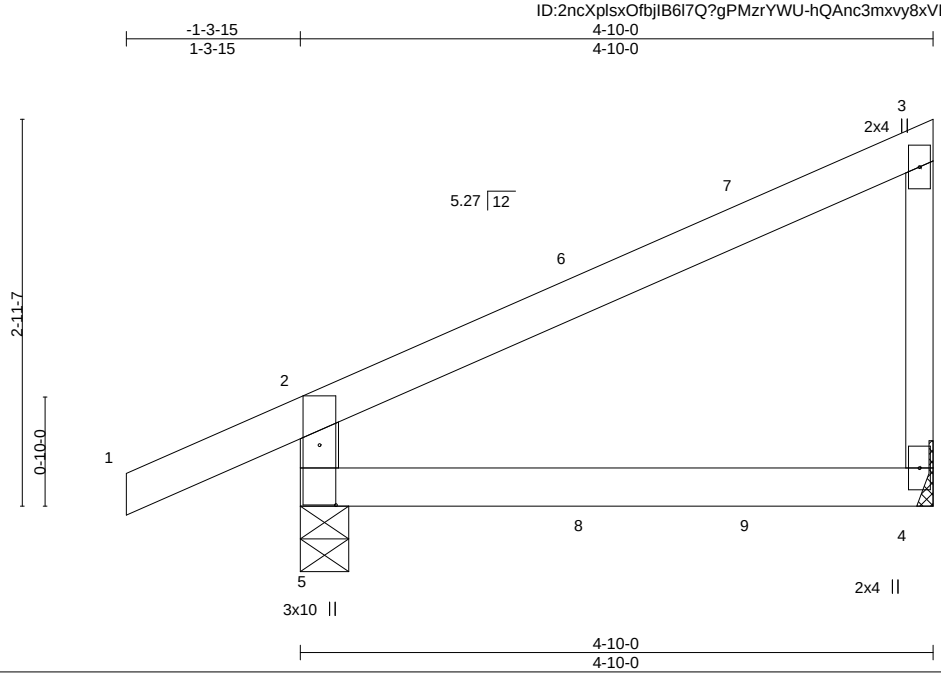

Plate Offsets (X,Y)-- [5:0-5-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.02	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	-0.04	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 16 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-4: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-7, 4=Mechanical
Max Horz 5=123(LC 5)
Max Uplift 5=-71(LC 8), 4=-61(LC 5)
Max Grav 5=325(LC 1), 4=190(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-288/102

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 74 lb down and 31 lb up at 2-3-2, and 88 lb down and 58 lb up at 3-6-5 on top chord, and 7 lb down and 10 lb up at 2-3-2, and 14 lb down at 3-6-5 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 8=3(B) 9=-2(F)

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J7	Jack-Open	1	1	I45768012
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:58 2021 Page 1
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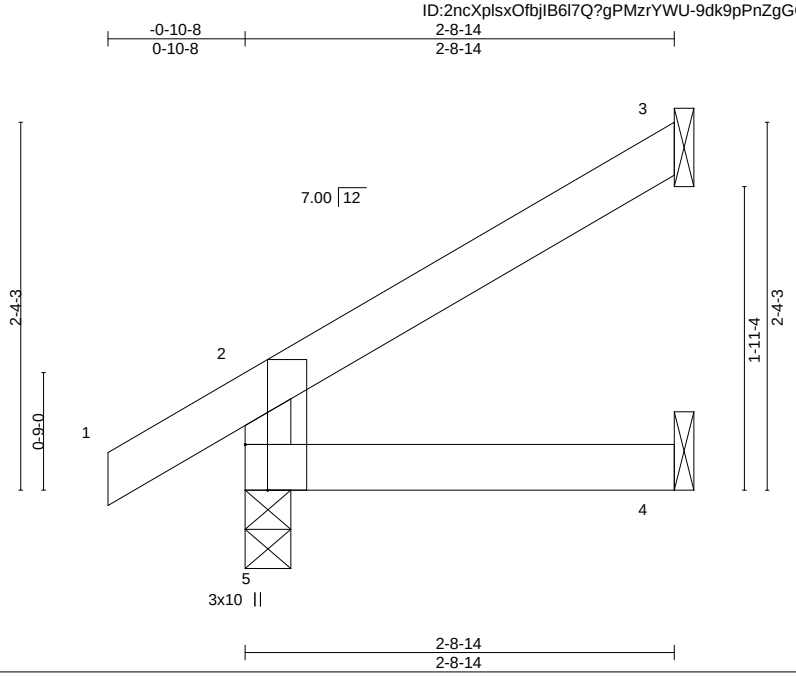

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 8 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=74(LC 8)
Max Uplift 5=-18(LC 8), 3=-50(LC 8)
Max Grav 5=200(LC 1), 3=79(LC 15), 4=47(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J8	Diagonal Hip Girder	1	1	I45768013

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:59 2021 Page 1

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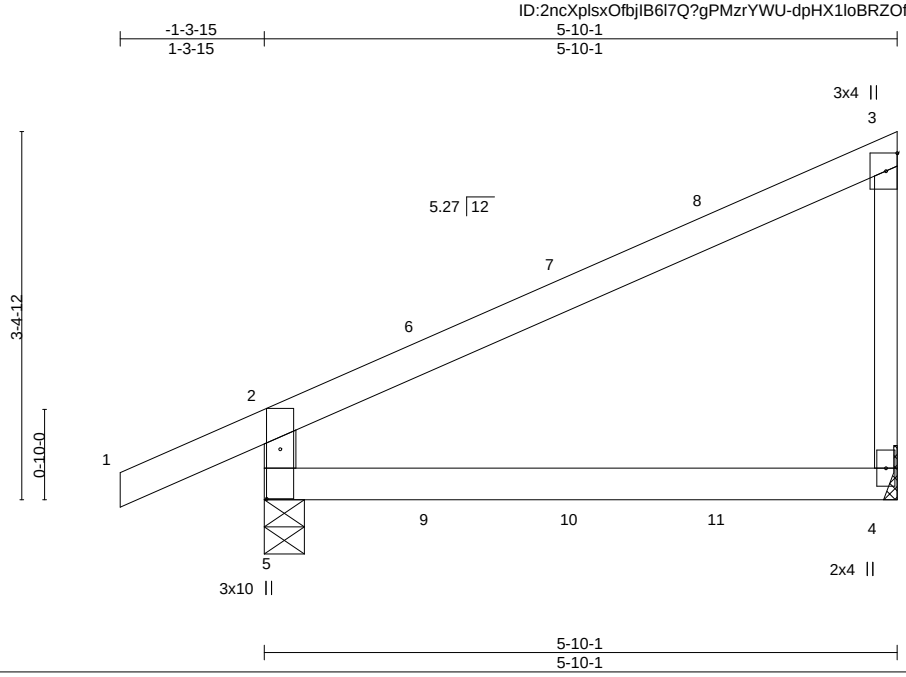

Scale = 1:21.2

Plate Offsets (X,Y)-- [5:0-5-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	-0.04	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.28	Vert(CT)	-0.08	4-5	>815	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.03	4-5	>999	240	Weight: 18 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-4: 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-4-7, 4=Mechanical
Max Horz 5=142(LC 25)
Max Uplift 5=-96(LC 8), 4=-91(LC 5)
Max Grav 5=349(LC 1), 4=232(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-5=-303/131

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 96 lb up at 1-7-3, and 84 lb down and 48 lb up at 2-10-12, and 90 lb down and 64 lb up at 4-3-1 on top chord, and 8 lb down and 11 lb up at 1-7-3, and 7 lb down at 2-10-12, and 16 lb down and 15 lb up at 4-3-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-3=-70, 4-5=-20
Concentrated Loads (lb)
Vert: 6=27(F) 11=-2(F)

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J9	Jack-Open	1	1	I45768014

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:00 2021 Page 1

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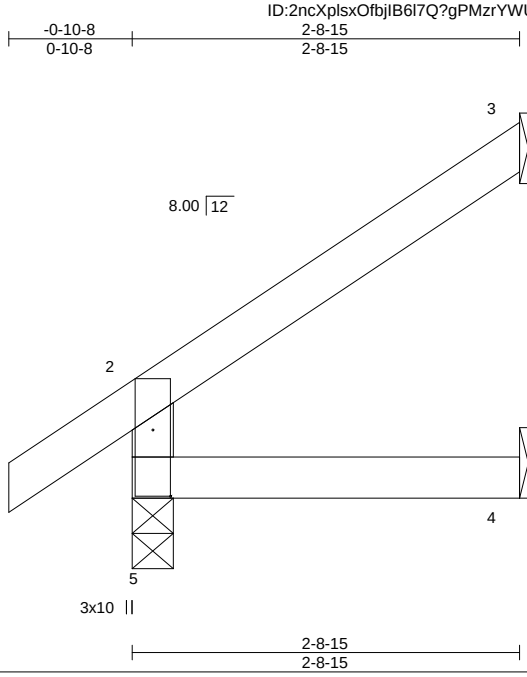

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.08	Vert(LL)	-0.00	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 9 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=84(LC 8)
Max Uplift 5=-8(LC 8), 3=-57(LC 8)
Max Grav 5=200(LC 1), 3=81(LC 15), 4=47(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J10	Jack-Open	14	1	I45768015
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:46 2021 Page 1
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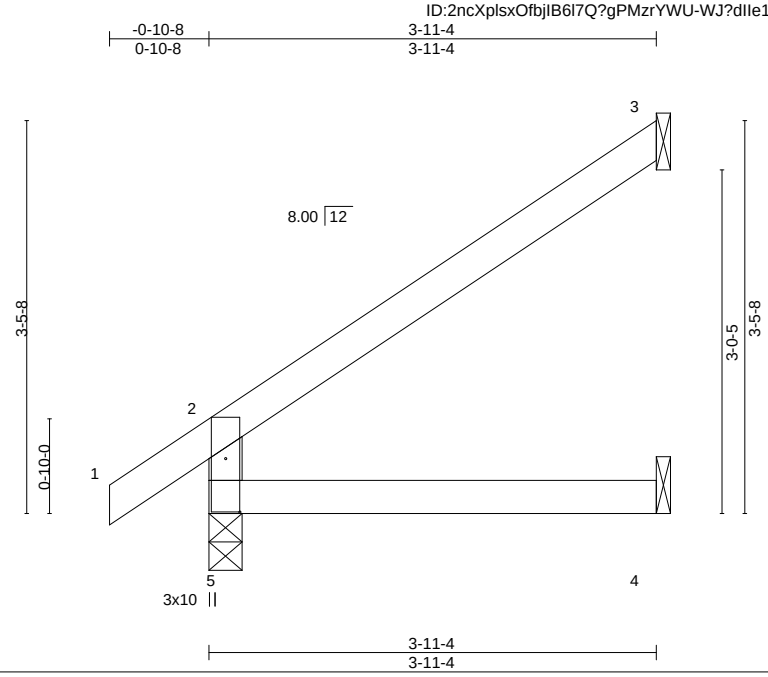


Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	4-5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	4-5	>999	240	Weight: 12 lb	FT = 10%

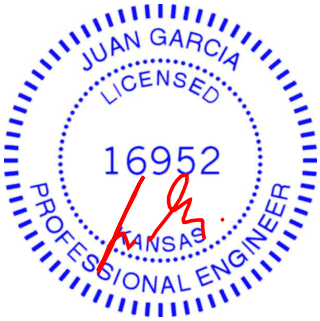
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=82(LC 8)
Max Uplift 3=-51(LC 8)
Max Grav 5=249(LC 1), 3=119(LC 13), 4=71(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J11	Jack-Open	2	1	I45768016

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:47 2021 Page 1

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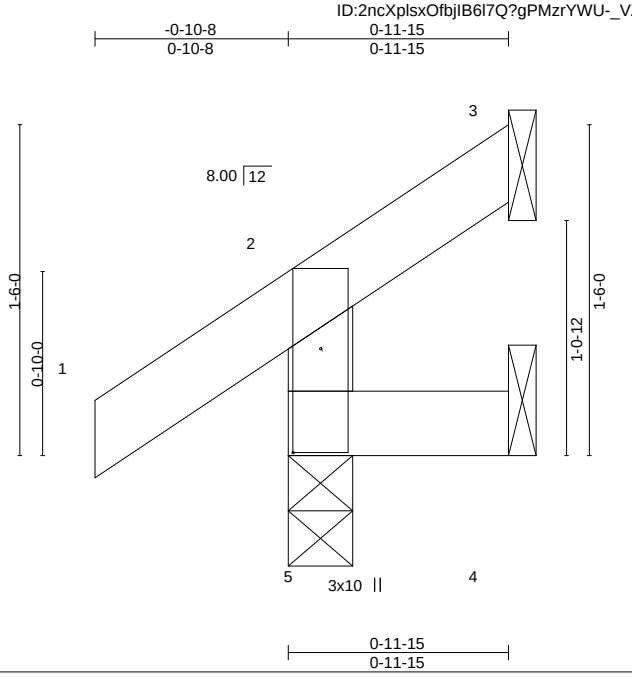

Plate Offsets (X,Y)-- [5:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	5	>999	240	Weight: 4 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 0-11-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=38(LC 8)
Max Uplift 5=-16(LC 8), 3=-16(LC 8), 4=-6(LC 5)
Max Grav 5=153(LC 1), 3=9(LC 6), 4=13(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J12	Jack-Open	2	1	I45768017
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:47 2021 Page 1
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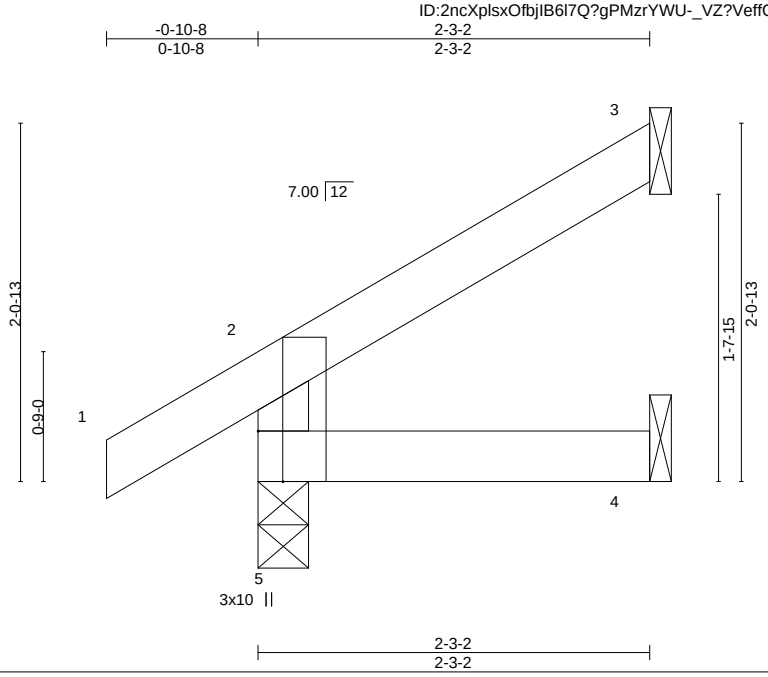

Plate Offsets (X,Y)-- [5:0-3-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	4-5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	4-5	>999	240	Weight: 7 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-3-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 5=62(LC 8)
Max Uplift 5=-19(LC 8), 3=-41(LC 8)
Max Grav 5=182(LC 1), 3=61(LC 15), 4=38(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J13	Jack-Open	2	1	I45768018
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:48 2021 Page 1
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0-10-8 3-11-4

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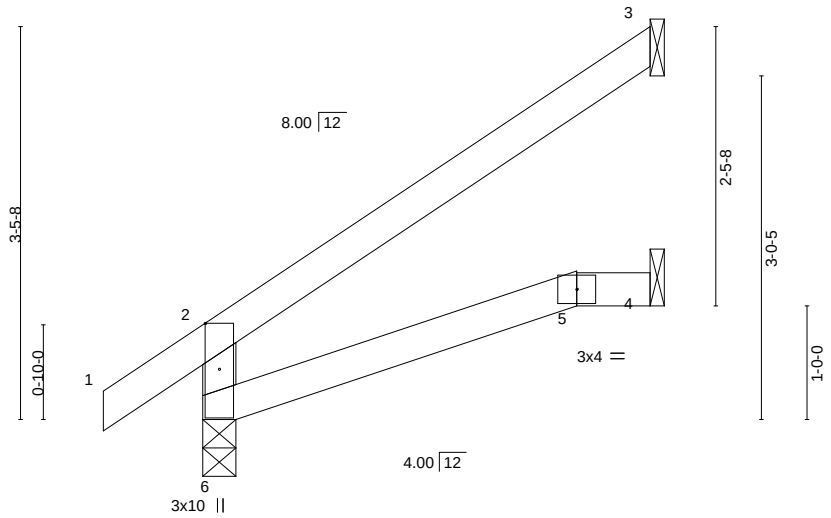

3-3-8 3-11-4
3-3-8 0-7-12

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	5-6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	-0.02	5-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5-6	>999	240	Weight: 12 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=81(LC 8)
Max Uplift 3=-51(LC 8)
Max Grav 6=249(LC 1), 3=120(LC 13), 4=70(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

STATE OF MISSOURI
JUAN GARCIA
NUMBER E-2000162101
PROFESSIONAL ENGINEER

JUAN GARCIA
LICENSED
16952
KANSAS
PROFESSIONAL ENGINEER

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J14	Diagonal Hip Girder	1	1	I45768019
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:49 2021 Page 1
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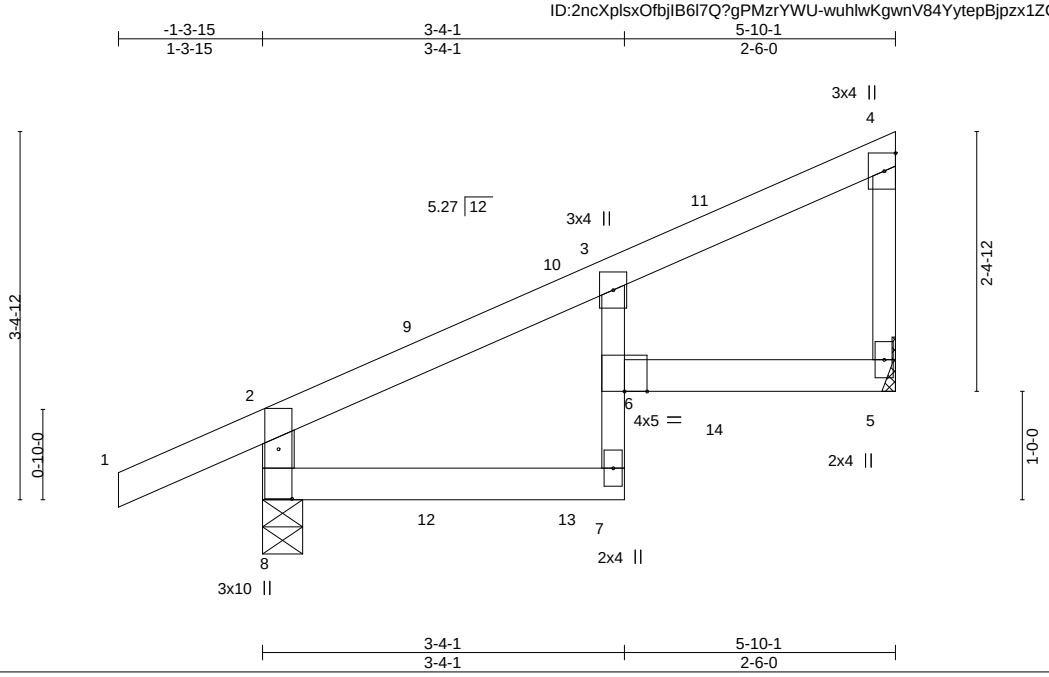

Plate Offsets (X,Y)-- [8:0-5-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.32	Vert(LL)	-0.05	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.43	Vert(CT)	-0.08	7	>799	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.06	7	>999	240	Weight: 19 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2 *Except*
4-5: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-10-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-4-7, 5=Mechanical
Max Horz 8=125(LC 25)
Max Uplift 8=-103(LC 8), 5=-116(LC 8)
Max Grav 8=356(LC 1), 5=253(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-8=-326/127

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 8=103, 5=116.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 56 lb down and 96 lb up at 1-7-3, and 84 lb down and 48 lb up at 2-10-12, and 63 lb down and 22 lb up at 4-3-1 on top chord, and 8 lb down and 11 lb up at 1-7-3, and 7 lb down at 2-10-12, and 44 lb down and 66 lb up at 4-3-1 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-70, 2-4=-70, 7-8=-20, 5-6=-20
Concentrated Loads (lb)
Vert: 9=27(B) 14=-30(B)

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J15	Jack-Open	1	1	I45768020
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:50 2021 Page 1
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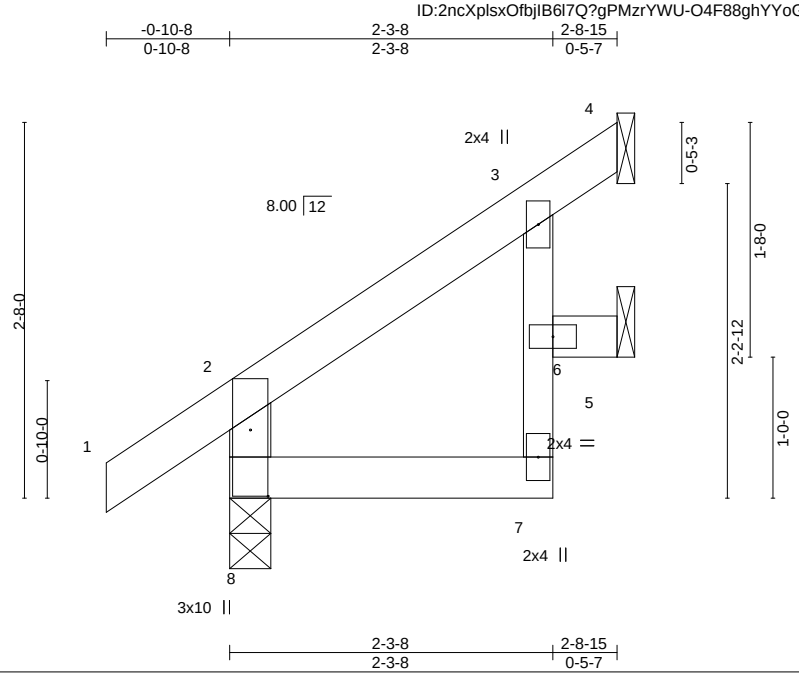


Plate Offsets (X,Y)-- [8:0-5-10,0-1-8]

LOADING	(psf)	SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	-0.00	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	-0.00	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.00	6	>999	240	Weight: 10 lb	FT = 10%

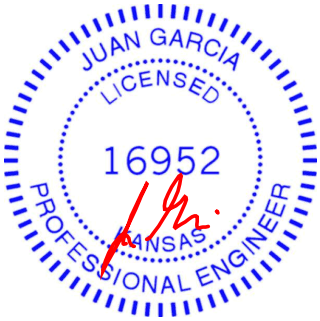
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-15 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=84(LC 8)
Max Uplift 8=-8(LC 8), 4=-8(LC 8), 5=-49(LC 8)
Max Grav 8=200(LC 1), 4=43(LC 1), 5=71(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J16	Jack-Open	5	1	I45768021

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:52 2021 Page 1

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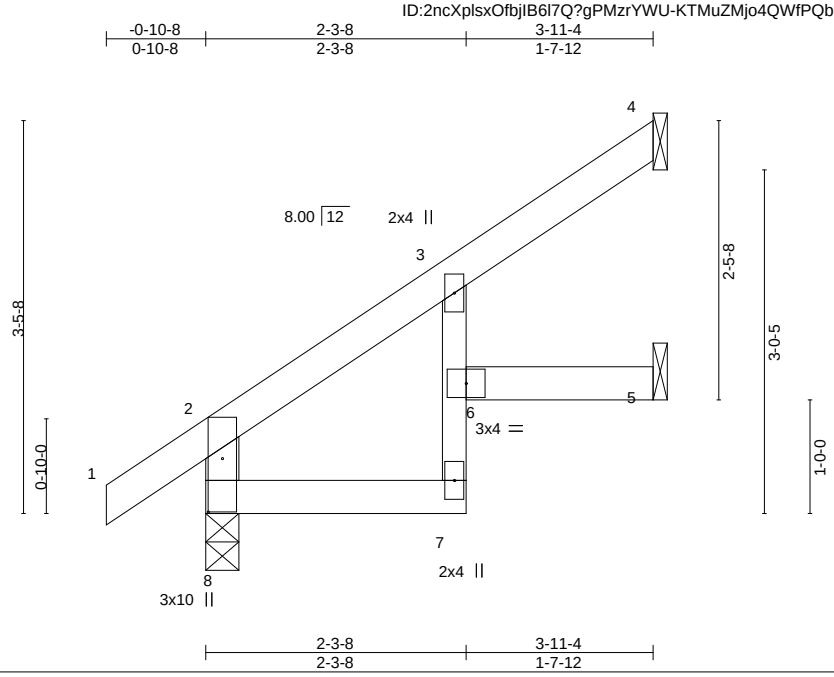

Plate Offsets (X,Y)-- [8:0-5-10,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	-0.01	6	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	-0.02	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	6	>999	240	Weight: 13 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
3-7: 2x3 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 8=0-3-8, 4=Mechanical, 5=Mechanical
Max Horz 8=82(LC 8)
Max Uplift 4=-34(LC 8), 5=-9(LC 8)
Max Grav 8=249(LC 1), 4=102(LC 13), 5=64(LC 13)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4, 5.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	J17	Jack-Open	5	1	I45768022
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:08:52 2021 Page 1
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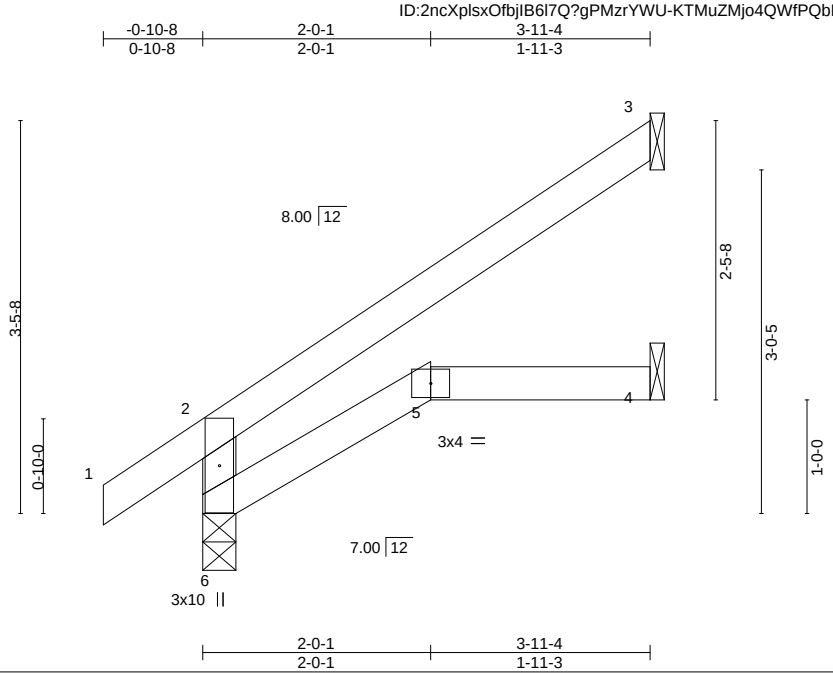

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	-0.01	5	>999	360	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	-0.02	5	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R		Wind(LL)	0.01	5	>999	240	Weight: 12 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 6=0-3-8, 3=Mechanical, 4=Mechanical
Max Horz 6=81(LC 8)
Max Uplift 3=-52(LC 8)
Max Grav 6=249(LC 1), 3=120(LC 13), 4=70(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	LAY1	GABLE	1	1	I45768023
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:01 2021 Page 1
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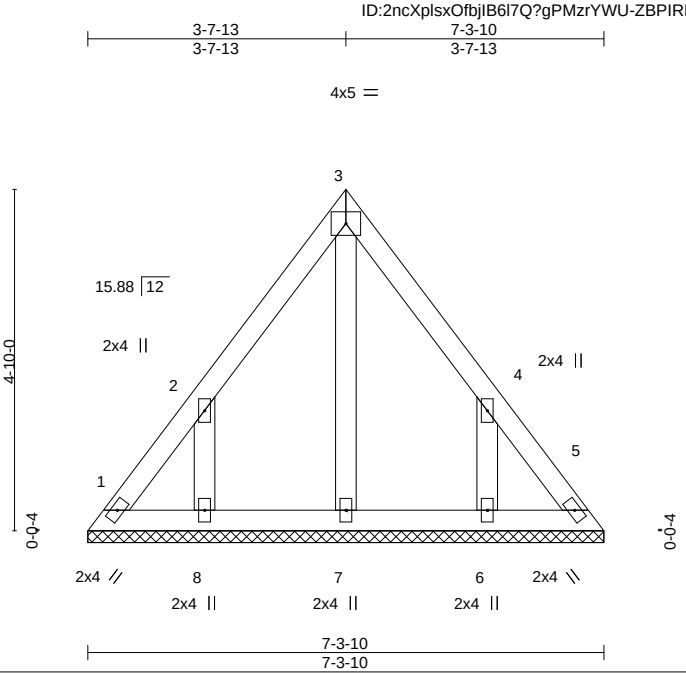

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 30 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x4 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 7-3-10.
(lb) - Max Horz 1=125(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-191(LC 8), 6=-190(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7, 8, 6

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=191, 6=190.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	LAY2	GABLE	1	1	I45768024
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:02 2021 Page 1
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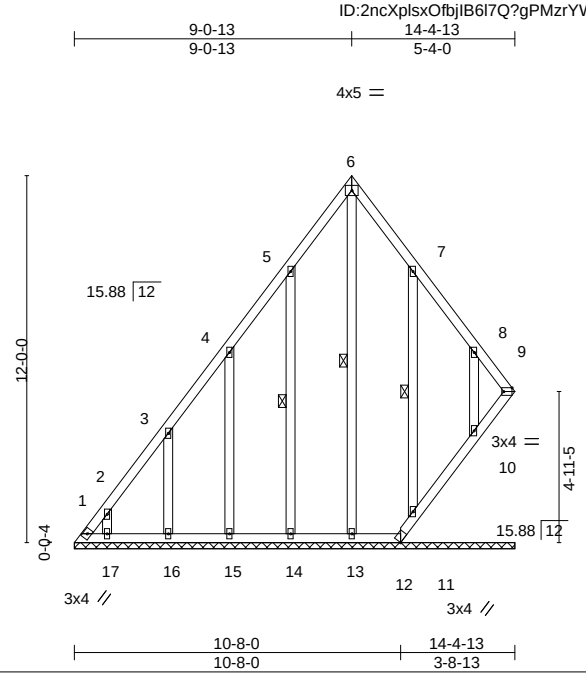

Plate Offsets (X,Y)-- [9:Edge,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 93 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 6-13, 5-14, 7-11

REACTIONS. All bearings 14-4-13.
(lb) - Max Horz 1=316(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 1=-237(LC 6), 9=-223(LC 7), 12=-231(LC 9), 14=-177(LC 8), 15=-179(LC 8), 16=-181(LC 8), 17=-147(LC 8), 11=-153(LC 9), 10=-160(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 12, 13, 14, 15, 16, 17, 11, 10 except 1=464(LC 8), 9=382(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-579/310, 2-3=-443/256, 3-4=-259/177
BOT CHORD 11-12=-166/290, 10-11=-174/268, 9-10=-172/263

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 237 lb uplift at joint 1, 223 lb uplift at joint 9, 231 lb uplift at joint 12, 177 lb uplift at joint 14, 179 lb uplift at joint 15, 181 lb uplift at joint 16, 147 lb uplift at joint 17, 153 lb uplift at joint 11 and 160 lb uplift at joint 10.
8) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 9, 11, 10.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	LAY3	GABLE	1	1	I45768025

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:04 2021 Page 1

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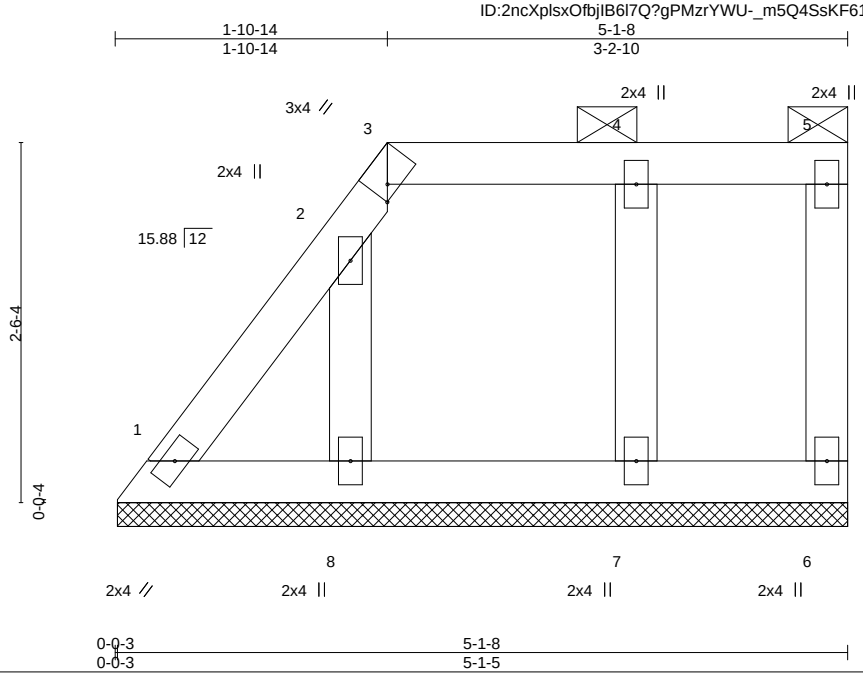

Plate Offsets (X,Y)-- [3:0-1-3,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 19 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-1-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-5.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 5-1-5.

(lb) - Max Horz 1=88(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) 1, 6, 8, 7

Max Grav All reactions 250 lb or less at joint(s) 1, 6, 8, 7

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6, 8, 7.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	LAY4	GABLE	2	1	I45768026

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:05 2021 Page 1

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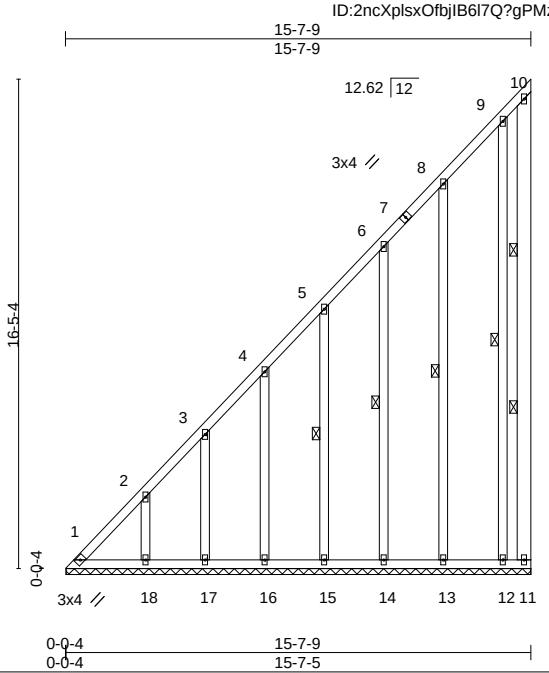

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	-0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 140 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x6 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 5-15, 6-14, 8-13, 9-12
	2 Rows at 1/3 pts 10-11

REACTIONS. All bearings 15-7-5.

(lb) - Max Horz 1=646(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 11, 12 except 1=-183(LC 6), 18=-156(LC 8), 17=-115(LC 8), 16=-126(LC 8), 15=-123(LC 8), 14=-123(LC 8), 13=-133(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 11, 17, 16, 15, 14, 13, 12 except 1=620(LC 8), 18=256(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-880/343, 2-3=-732/281, 3-4=-614/239, 4-5=-488/192, 5-6=-363/146

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 12 except (jt=lb) 1=183, 18=156, 17=115, 16=126, 15=123, 14=123, 13=133.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	LAY5	GABLE	1	1	I45768027

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:07 2021 Page 1

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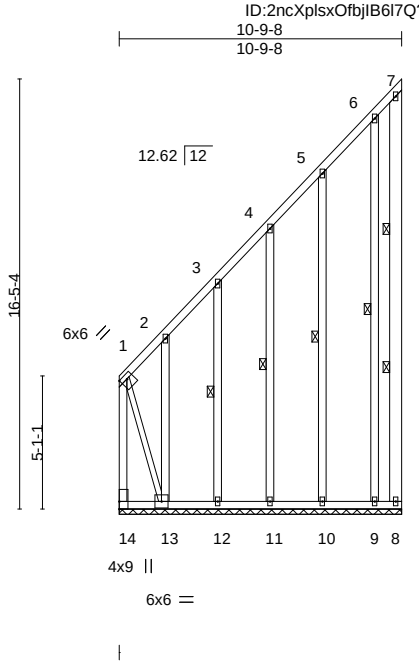

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.70	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.34	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 128 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except* 7-8: 2x6 SPF No.2, 1-13: 2x3 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 8-10-12 oc bracing: 13-14.
WEBS	1 Row at midpt 3-12, 4-11, 5-10, 6-9 2 Rows at 1/3 pts 7-8

REACTIONS. All bearings 10-9-8.

(lb) - Max Horz 14=447(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 8, 9 except 14=-624(LC 6), 13=-1451(LC 8), 12=-135(LC 8), 11=-121(LC 8), 10=-133(LC 8)

Max Grav All reactions 250 lb or less at joint(s) 8, 12, 11, 10, 9 except 14=1766(LC 8), 13=635(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD	1-14=-1740/630, 1-2=-607/237, 2-3=-499/197, 3-4=-365/146
BOT CHORD	13-14=-440/164
WEBS	1-13=-518/1394

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) All plates are 2x4 MT20 unless otherwise indicated.
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8, 9 except (jt=lb) 14=624, 13=1451, 12=135, 11=121, 10=133.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	LAY6	GABLE	1	1	I45768028

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:08 2021 Page 1
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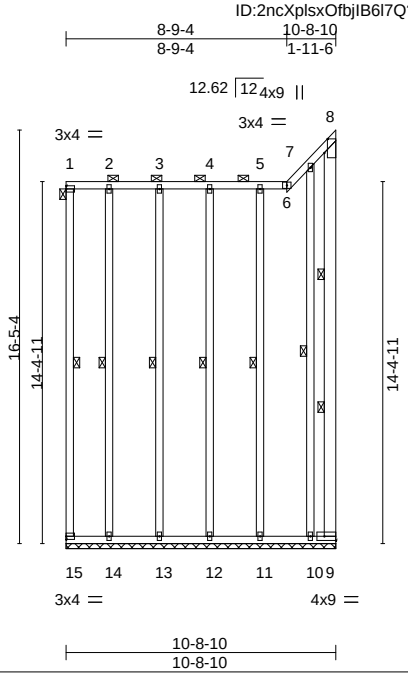

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Plate Offsets (X,Y)-- [8:Edge,0-1-8], [9:Edge,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.46	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.54	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.33	Horz(CT)	-0.00	9	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 150 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2 *Except*
	8-9: 2x6 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 1-6.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 1-15, 2-14, 3-13, 4-12, 5-11, 7-10
	2 Rows at 1/3 pts 8-9

REACTIONS. All bearings 10-8-10.
(lb) - Max Horz 15=71(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 15, 13, 12, 11 except 9=-1010(LC 8), 14=-288(LC 8), 10=-307(LC 6)
Max Grav All reactions 250 lb or less at joint(s) 15, 14, 13, 12, 11 except 9=387(LC 6), 10=994(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-260/102, 8-9=-158/397
WEBS 7-10=-319/98

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; Lumber DOL=1.60 plate grip DOL=1.60
2) Provide adequate drainage to prevent water ponding.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 15, 13, 12, 11 except (jt=lb) 9=1010, 14=288, 10=307.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	P1	Piggyback	8	1	I45768029
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:09 2021 Page 1
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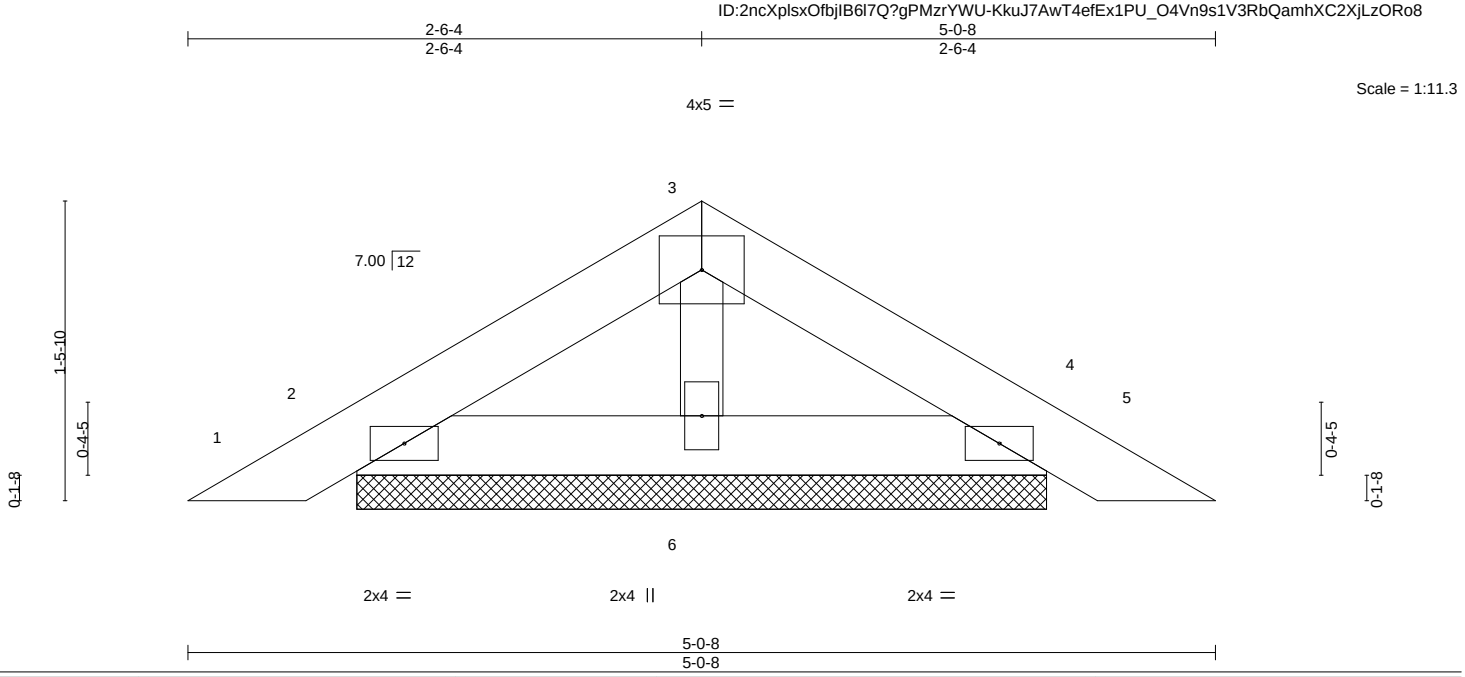

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	4	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 11 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=3-4-10, 4=3-4-10, 6=3-4-10
Max Horz 2=34(LC 7)
Max Uplift 2=-34(LC 8), 4=-38(LC 9)
Max Grav 2=125(LC 1), 4=125(LC 1), 6=130(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
8) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V1	Valley	1	1	I45768030

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:10 2021 Page 1

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6-10-11 14-8-5 21-7-0

6-10-11 7-9-10 6-10-11

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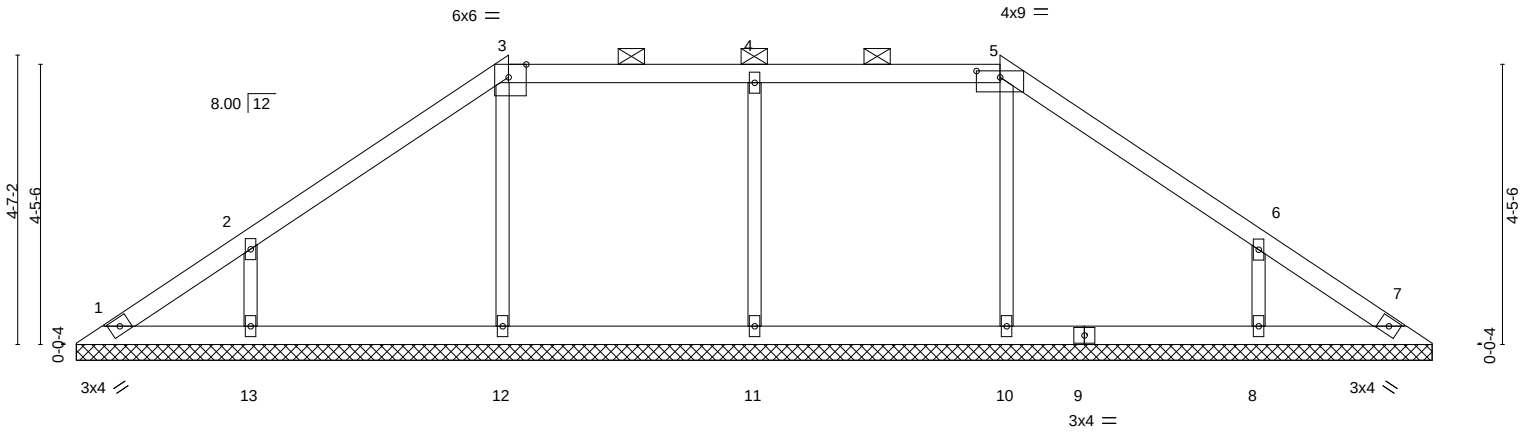

0-0-6 21-7-0

0-0-6 21-6-10

Plate Offsets (X,Y)-- [3:0-3-6,Edge], [5:0-4-8,0-1-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 63 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 21-6-4.

(lb) - Max Horz 1=110(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 1, 10, 11, 12 except 13=-145(LC 8), 8=-144(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 10=367(LC 24), 11=461(LC 23), 12=369(LC 15), 13=412(LC 15), 8=412(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-11=-311/134, 2-13=-294/187, 6-8=-294/186

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 10, 11, 12 except (jt=lb) 13=145, 8=144.
9) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V2	Valley	1	1	I45768031

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:16 2021 Page 1
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6-10-11 | 4-3-10 | 6-10-11

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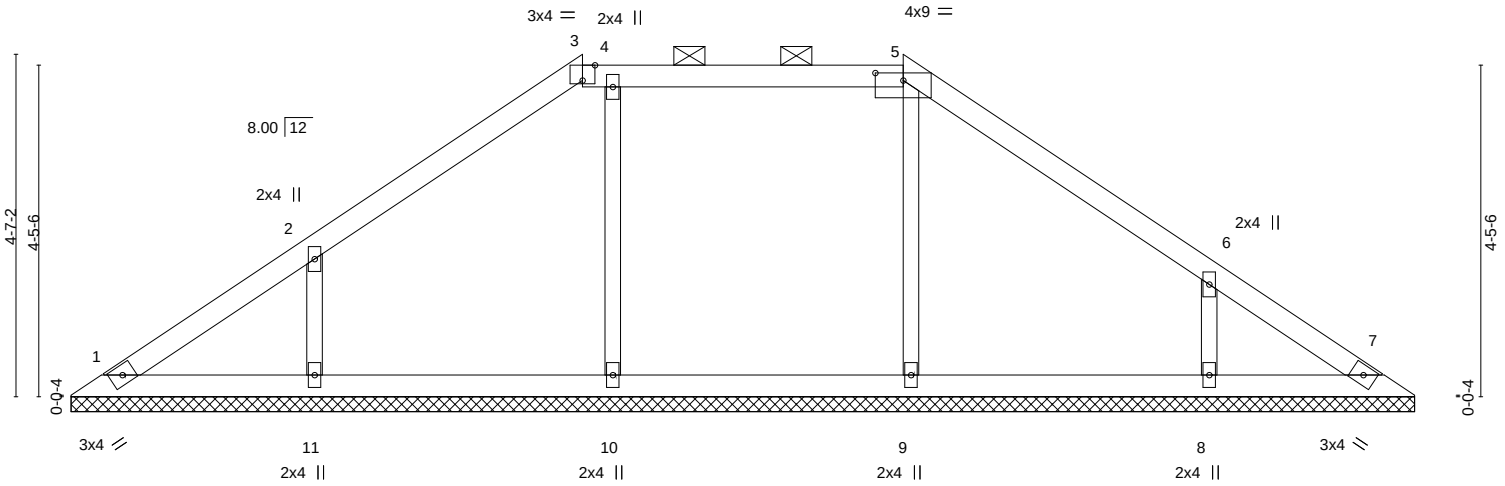

0-0-6 | 18-1-0
0-0-6 | 18-0-10

Plate Offsets (X,Y)-- [3:0-2-0,Edge], [5:0-4-8,0-1-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 52 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-5.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 18-0-4.
(lb) - Max Horz 1=110(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 10 except 11=-134(LC 8), 8=-144(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 9=405(LC 24), 10=405(LC 23), 11=412(LC 15), 8=410(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 5-9=-280/96, 4-10=-281/112, 2-11=-282/175, 6-8=-293/186

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 10 except (jt=lb) 11=134, 8=144.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V3	Valley	1	1	I45768032
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:18 2021 Page 1
ID:2ncXplsxOfbjIB6l7Q?gPMzrYWU-aTxj0F16yPozXPbC0nkce2kY1hVY1ev0b6kWYKzORo?

6-10-11 7-8-5 14-7-0
6-10-11 0-9-10 6-10-11

Scale = 1:28.6

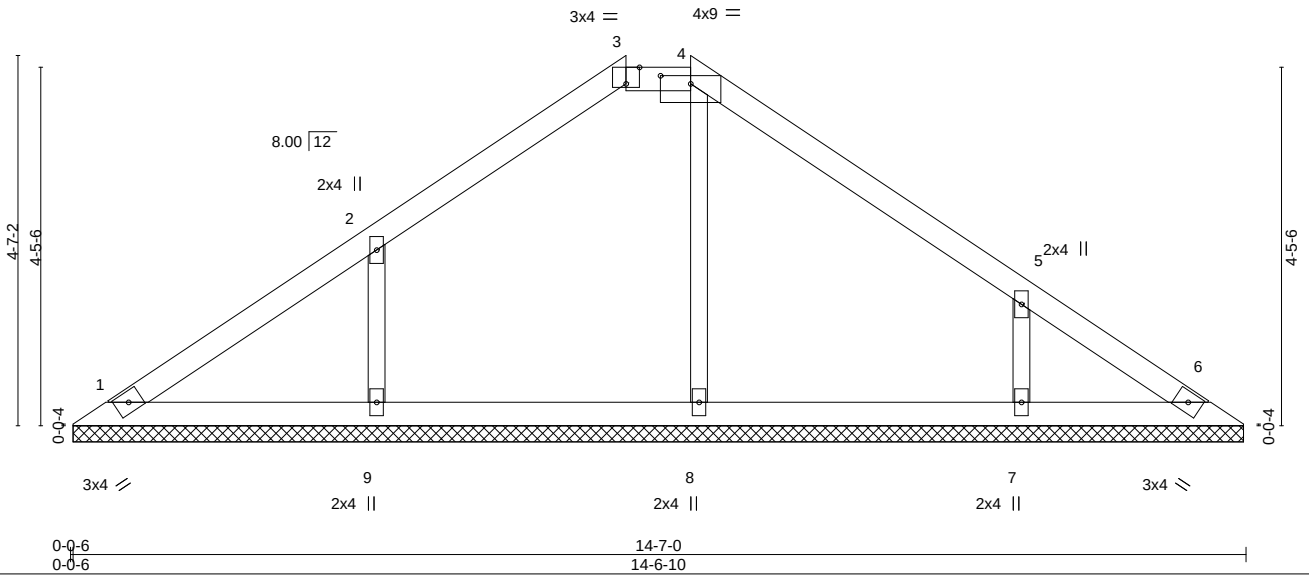

Plate Offsets (X,Y)-- [3:0-2-0,Edge], [4:0-4-8,0-1-3]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 41 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 3-4.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-6-4.
(lb) - Max Horz 1=110(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 6 except 9=-132(LC 8), 7=-147(LC 9)
Max Grav All reactions 250 lb or less at joint(s) 1, 6 except 8=274(LC 22), 9=374(LC 15), 7=361(LC 16)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-286/173, 5-7=-291/188

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6 except (jt=lb) 9=132, 7=147.
8) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V4	Valley	1	1	I45768033
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:18 2021 Page 1
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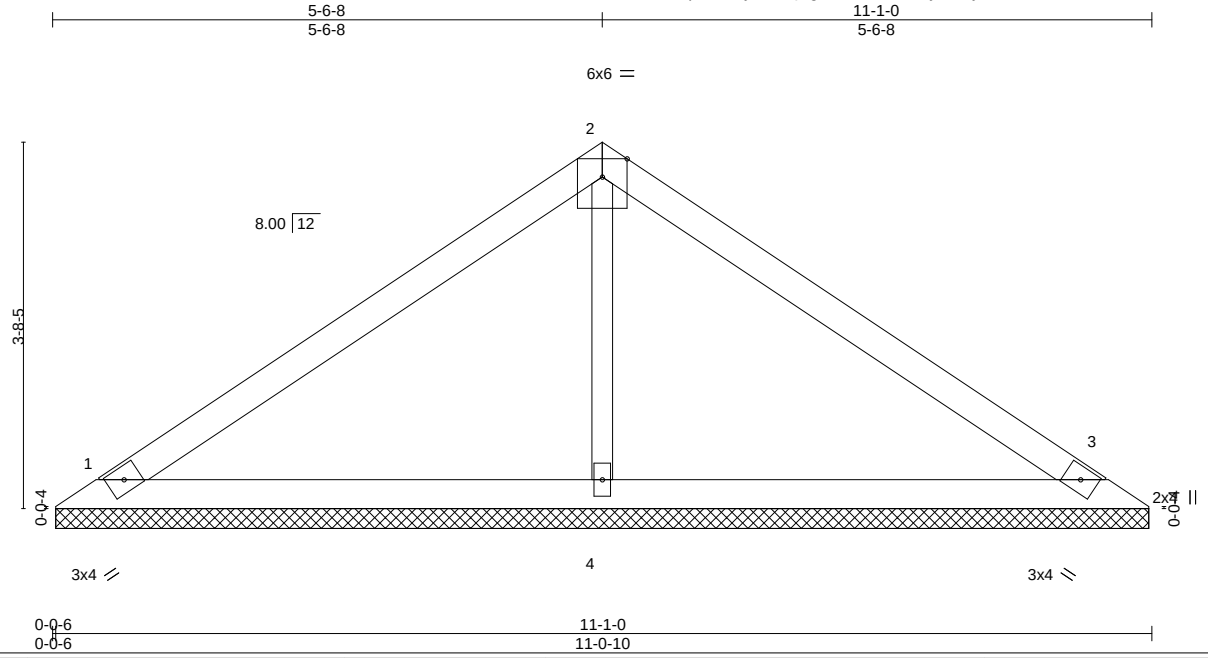

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.36	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-S							Weight: 29 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=11-0-4, 3=11-0-4, 4=11-0-4
Max Horz 1=-88(LC 4)
Max Uplift 1=-44(LC 8), 3=-55(LC 9), 4=-17(LC 8)
Max Grav 1=234(LC 1), 3=234(LC 1), 4=443(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-288/73

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3, 4.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V5	Valley	1	1	I45768034
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:19 2021 Page 1
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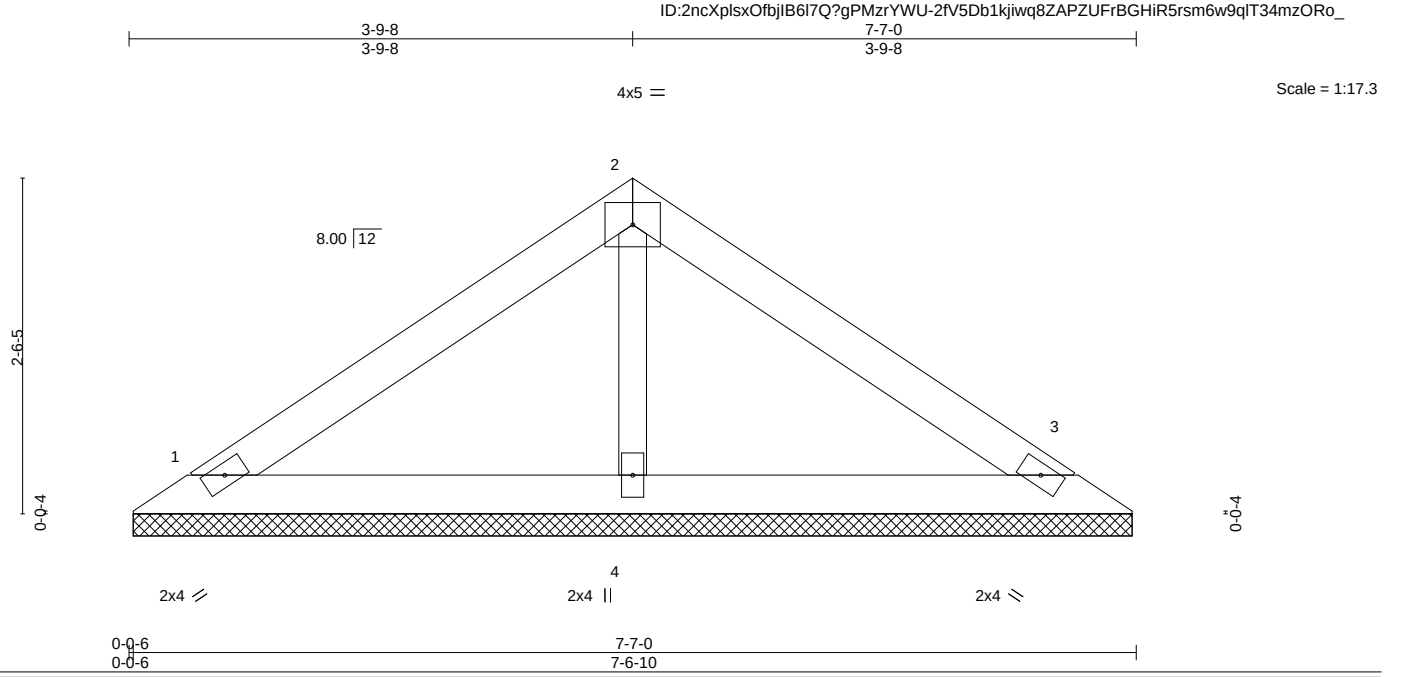

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 19 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-6-4, 3=7-6-4, 4=7-6-4
Max Horz 1=-58(LC 4)
Max Uplift 1=-37(LC 8), 3=-44(LC 9)
Max Grav 1=168(LC 1), 3=168(LC 1), 4=261(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V6	Valley	1	1	I45768035

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:20 2021 Page 1

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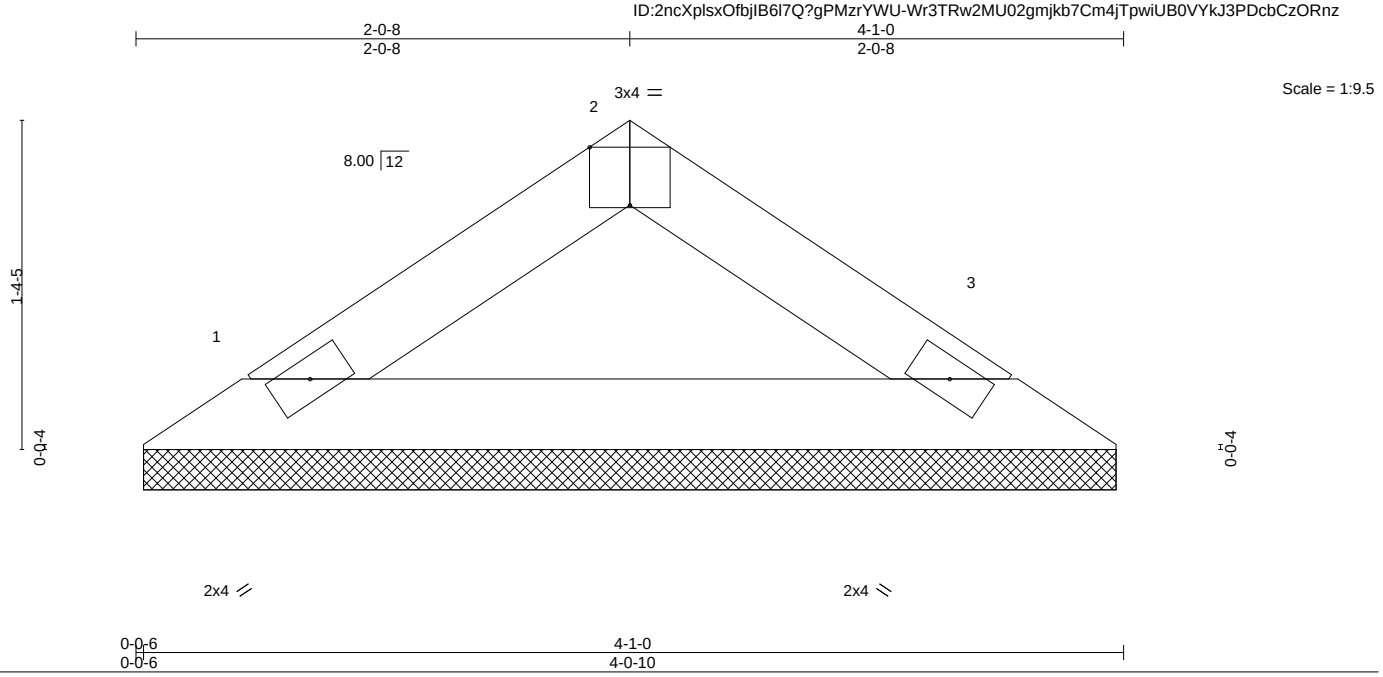

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 9 lb	FT = 10%

LUMBER-

TOP CHORD 2x4 SPF No.2

BOT CHORD 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-1-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-0-4, 3=4-0-4

Max Horz 1=-27(LC 4)

Max Uplift 1=-16(LC 8), 3=-16(LC 9)

Max Grav 1=140(LC 1), 3=140(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
7) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V7	Valley	1	1	I45768036
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:21 2021 Page 1
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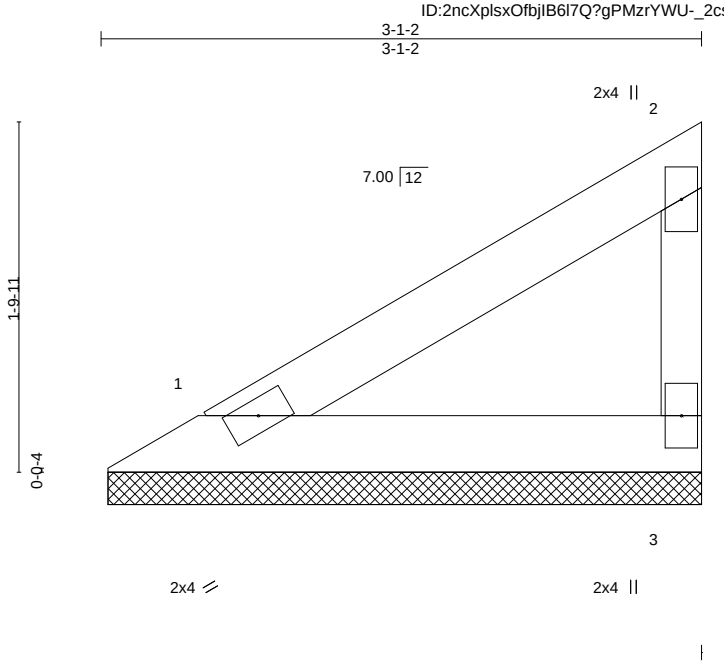

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LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 8 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-0-11, 3=3-0-11
Max Horz 1=57(LC 5)
Max Uplift 1=-12(LC 8), 3=-29(LC 8)
Max Grav 1=110(LC 1), 3=116(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V8	Valley	1	1	I45768037
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:22 2021 Page 1
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-0-10-8 4-2-0
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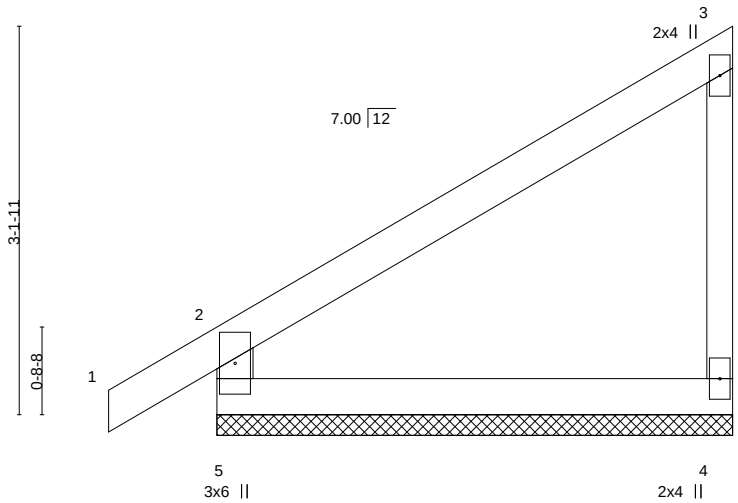


LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	-0.01	1	n/r	120	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-R							Weight: 14 lb	FT = 10%

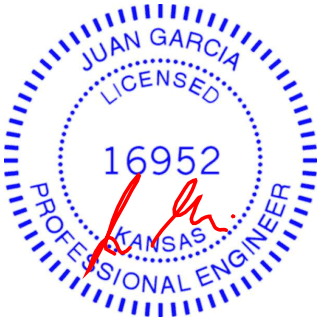
LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2 *Except*
3-4: 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=4-2-0, 4=4-2-0
Max Horz 5=120(LC 5)
Max Uplift 5=-40(LC 8), 4=-50(LC 8)
Max Grav 5=257(LC 1), 4=183(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 4.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V9	Valley	1	1	I45768038
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:23 2021 Page 1
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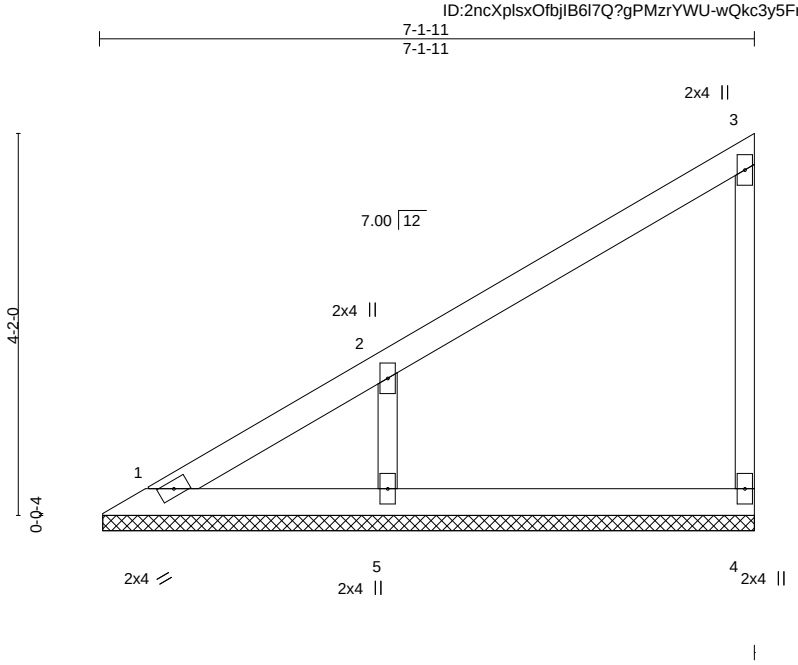

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 21 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2
OTHERS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-1-5, 4=7-1-5, 5=7-1-5
Max Horz 1=151(LC 5)
Max Uplift 1=-10(LC 4), 4=-30(LC 5), 5=-128(LC 8)
Max Grav 1=91(LC 16), 4=153(LC 15), 5=387(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-303/179

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=128.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V10	Valley	1	1	I45768039
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:11 2021 Page 1
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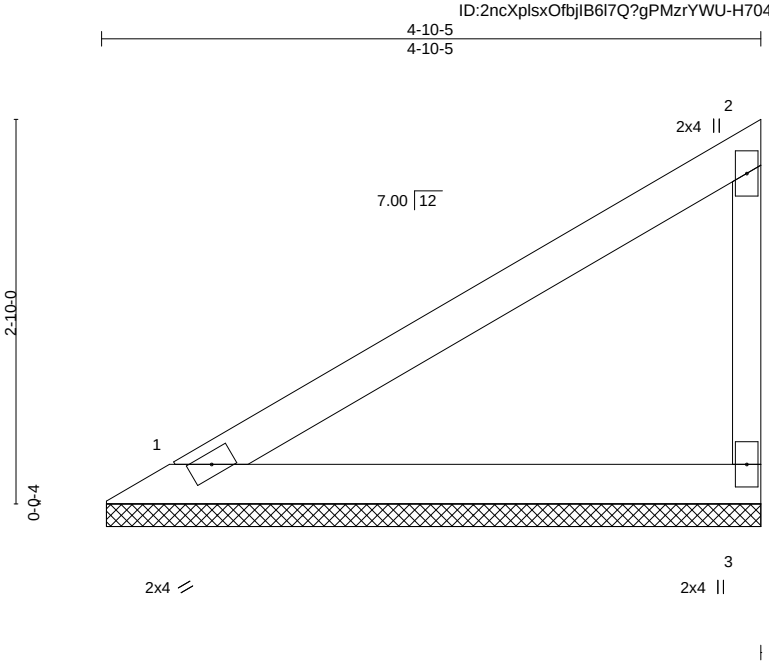

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.34	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 13 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-5 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-9-14, 3=4-9-14
Max Horz 1=98(LC 5)
Max Uplift 1=-20(LC 8), 3=-50(LC 8)
Max Grav 1=190(LC 1), 3=200(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V11	Valley	1	1	I45768040
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:12 2021 Page 1
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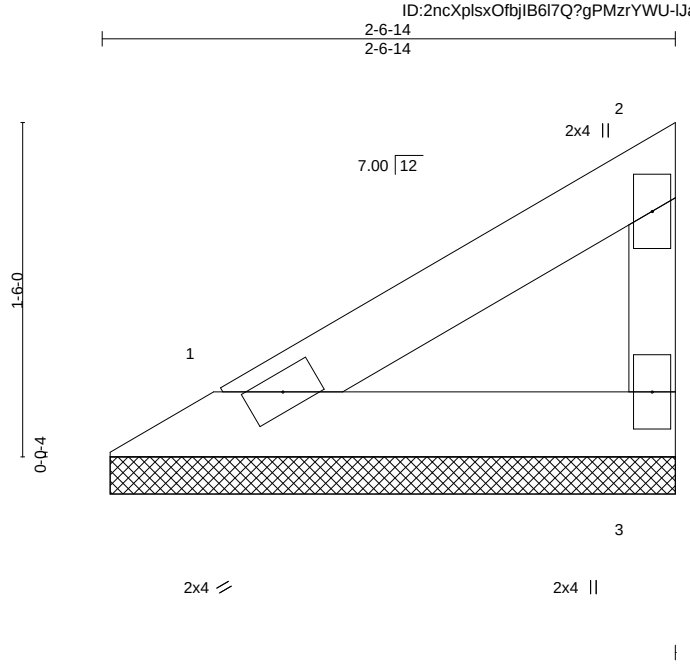

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 6 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-6-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-6-7, 3=2-6-7
Max Horz 1=45(LC 5)
Max Uplift 1=-9(LC 8), 3=-23(LC 8)
Max Grav 1=87(LC 1), 3=91(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V12	Valley	1	1	I45768041

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:12 2021 Page 1

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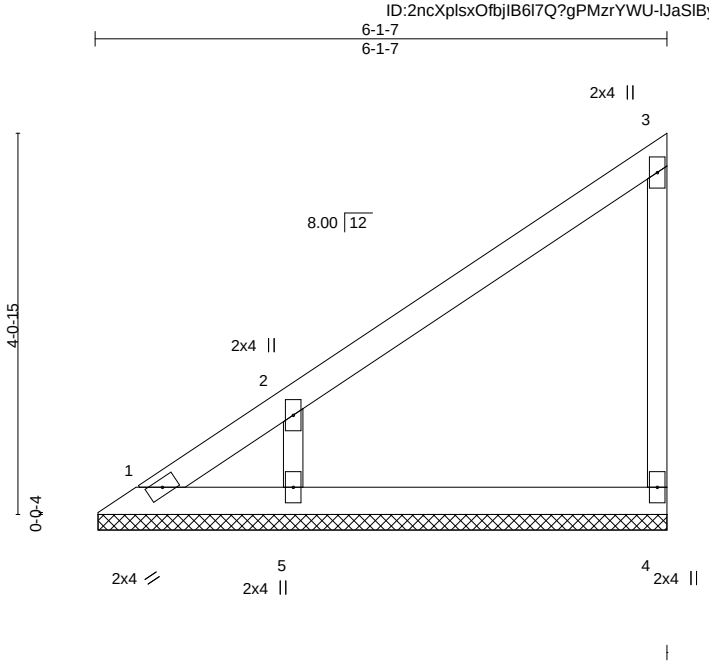

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	-0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 18 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2
OTHERS	2x3 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=6-1-1, 4=6-1-1, 5=6-1-1
Max Horz 1=147(LC 5)
Max Uplift 1=-51(LC 6), 4=-36(LC 5), 5=-139(LC 8)
Max Grav 1=78(LC 5), 4=157(LC 15), 5=374(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-5=-294/188

NOTES-

1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 4 except (jt=lb) 5=139.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V13	Valley	1	1	I45768042
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:13 2021 Page 1
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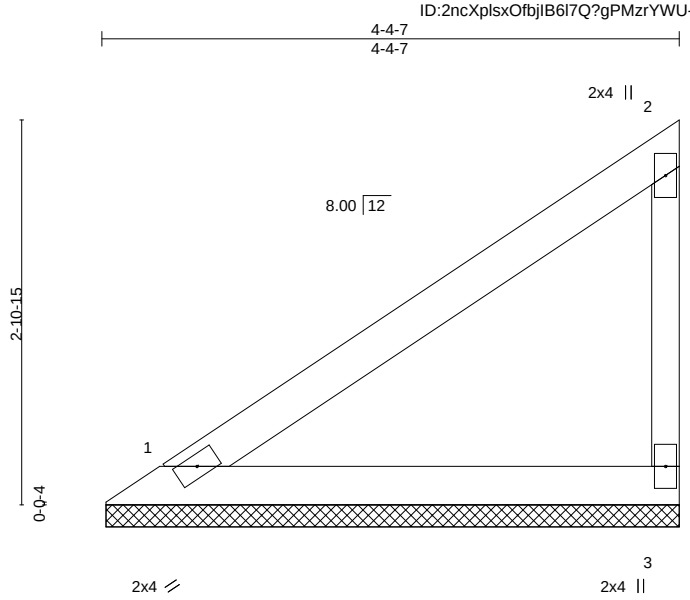

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 12 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-4-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=4-4-1, 3=4-4-1
Max Horz 1=100(LC 5)
Max Uplift 1=-14(LC 8), 3=-49(LC 8)
Max Grav 1=170(LC 1), 3=183(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V14	Valley	1	1	I45768043
					Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:14 2021 Page 1
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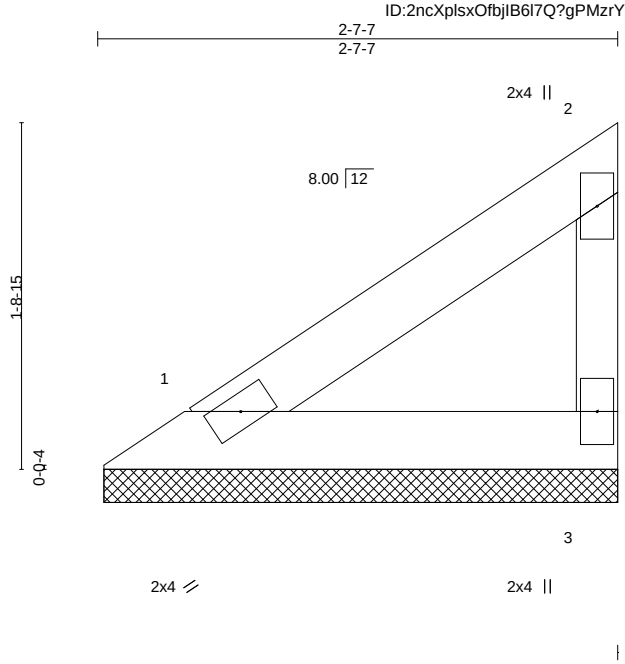

Scale = 1:11.6

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2018/TPI2014		Matrix-P							Weight: 7 lb	FT = 10%

LUMBER-
TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x3 SPF No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-7-7 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-1, 3=2-7-1
Max Horz 1=54(LC 5)
Max Uplift 1=-8(LC 8), 3=-27(LC 8)
Max Grav 1=92(LC 1), 3=98(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Lot 138 HT
210402	V15	Valley	1	1	I45768044

Job Reference (optional)

Wheeler Lumber, Waverly, KS - 66871, 8.430 s Mar 22 2021 MiTek Industries, Inc. Wed Apr 21 16:09:15 2021 Page 1

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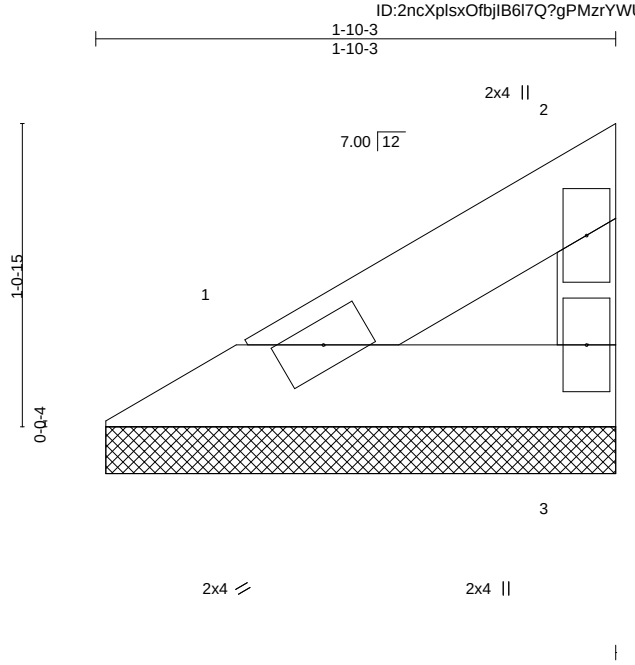


Scale = 1:8.2

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	25.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 4 lb	FT = 10%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x3 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 1-10-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=1-9-13, 3=1-9-13
Max Horz 1=28(LC 5)
Max Uplift 1=-6(LC 8), 3=-14(LC 8)
Max Grav 1=54(LC 1), 3=57(LC 15)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

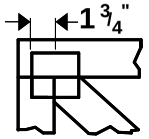
1) Wind: ASCE 7-16; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) Gable requires continuous bottom chord bearing.
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

April 22,2021

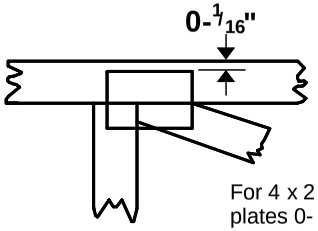
MiTek
16023 Swingley Ridge Rd
Chesterfield, MO 63017

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

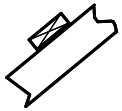
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

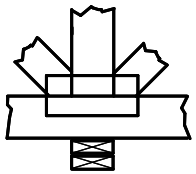
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

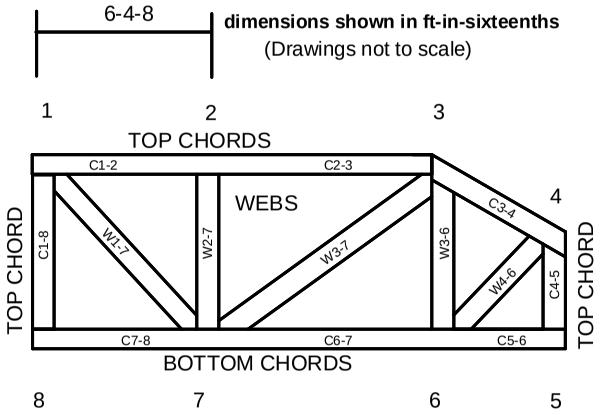


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.

21.The design does not take into account any dynamic or other loads other than those expressly stated.